ORDER LEX 7110.65A

Standard Operating Procedures

October 18, 2019

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Chapter 1. General

Section 1. Introduction

1-1. PURPOSE

To prescribe air traffic control procedures and phraseology for use by Lexington Air Traffic Control Tower operational personnel.

1-2. DISTRIBUTION

A printed copy of this order is distributed to the Lexington Main Facility Library, Tower, and TRACON. This order is located electronically within the FAA Facility Directives Repository (https://loa.faa.gov).

1-3. CANCELLATION

The LEX 7110.10G dated 11/17/17 is cancelled.

1-4. EFFECTIVE DATE

This order is effective November 1, 2018.

1-5. ABBREVATIONS

As used in the document, the following abbreviations/acronyms/identifiers have the meaning indicated.

Tbl. 1-1-1

Abbreviation	Meaning
ADG	ICAO Airplane Design Group (I,II, III, IV, V, VI)
ADR	Adapted Departure Route (Preferential Departure Route)
ADS-B	Automatic Dependent Surveillance Broadcast
AFSS	Automated Flight Service Station
AIRMET	Airmen's Meteorological Information
ALS	Approach Lighting System
ALSF	Approach Lighting System With Sequenced Flashing Lights
AOCC	Atlantic Operations Control Center
APREQ	Approval Request
ARP	Automatic Release Procedures

ARSR	Air Route Surveillance Radar
ARTCC	Air Route Traffic Control Center
ASOS	Automated Surface Observing System
ASOS-OID	Automated Surface Observing System Operator Interface Device
ASR	Airport Surveillance Radar
AT	Air Traffic
ATCT	Airport Traffic control Tower
ATCSCC	Air Traffic Control System Command Center
ATIS	Automatic Terminal Information System
ATTS	Automated Terminal Tracking System
AWOS	Automated Weather Observing System
CAT	Category of ILS
CBI	Computer Based Instruction
CD	Clearance Delivery
CDR	Critical Data Recording
CEDAR	Comprehensive Electronic Data Analysis and Reporting
CIC	Controller-in-Charge
CPC	Certified Professional Controller
CTRD	Certified Tower Radar Display
CVG	Covington ASR-9
CWA	Center Weather Advisory
DASI	Digital Altimeter Setting Indicator
DM	Departure Message
DME	Distance Measuring Equipment
ECVS	Emergency Communications Voice System
EDCT	Estimated Departure Clearance Time
EFSTS	Electronic Flight Strip Transfer System
EG	Engine Generator
ESP	En Route Spacing Programs
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FAAO	FAA Order (Always the current version)
FAF	Final Approach Fix
FD	Flight Data
FDB	Full Data Block
FDIO	Flight Data Input/Output
FRC	Full Route Clearance
FSP	Flight Strip Printer (IER 512C-FSP)
FSS	Flight Service Station
FWD	Call Forward Command
GA	General Aviation
GI	General Information Message
GPS	Global Positioning System
GS	Glide Slope

HDG	Heading
HIWAS	Hazardous In-flight Weather Advisory Service
HST	History
IAW	In Accordance With
ICAO	International Civil Aviation Organization
IDS	Information Display System
ILS	Instrument Landing System
IVSR	Interim Voice Switch Replacement
LA	Low Altitude Alert
LA/CA	Low Altitude Alert/Conflict Alert
LAN	Local Area Network ("S" Drive)
LC	Local Control (STARS Symbol T)
LEX ATCT	Includes Tower and TRACON
LEX Approach	Includes all radar positons in TRACON
LEX Satellites	Includes all other airports in LEX airspace other than LEX
LLWAS	Low Level Wind Shear Alert System
LLWAS-RS	Relocation/Sustainment
LLWAS-RS DSD	Display Selection Device
LOA	Letter of Agreement
LOC	Localizer
LUAW	Line Up and Wait
MBA	Microburst Alert
MIS	Meteorological Impact Statement
MM	Middle Marker
MOR	Mandatory Occurrence Report
MSAW	Minimum Safe Altitude Warning System.
MVA	Minimum Vectoring Altitude
NAS	National Airspace System
NAV/COM	Navigation/ Communications
NAVAID	Navigational Aid
NOTAM	Notice to Airmen
ODO	Opposite Direction Operations
OJT	On the Job Training
OM	Operations Manager
OS	Operations Supervisor
PIREP	Pilot Report
PLA	Planned Low Approach
PO	Point Out
POFZ	Precision Obstacle Free Zone
PPS	Plans and Procedures Specialist
QRI	Lynch ARSR
RAIL	Runway Alignment Indicator Lights
RB	Restore Base
RCO	Remote Communications Outlet
RD	Radar Data

RDP	Radar Data Processor (STARS)
RE	Radar East (STARS Symbol E)
RF	Radar Final (STARS Symbol F)
ROC	Regional Operations Center
RTR	Remote Transmitter/Receiver
RTS	Returned to Service
RVR	Runway Visual Range
RW	Radar West (STARS Symbol W)
RWY	Runway
SAWS	Stand Alone Weather Sensors
SDF	Louisville/Standiford Airport/ ASR-9
SDF ATCT	Includes Louisville Tower and TRACON
SDM	Supplemental Display Monitor
SFC	Surface
SFL	Sequence Flashing Lights
SIA	Status Information Area
SIGMET	Significant Meteorological Information
SSA	STARS- System Status Area
SSALR	Simplified Short Approach Lighting Systems with RAIL
SUA	Special Use Airspace
SWABS	Software Adaptation of Beacon Systems
TACAN	Tactical Air Navigation
TAF	Terminal Area Forecast
TAV	Tower Applied Visual Separation
TBFM	Time Based Flow Management
TCW	Terminal Control Workstation (TRACON)
TDW	Terminal Display Workstation (Tower)
TDWR	Terminal Doppler Weather Radar
TED	Touch Entry Display (IVSR)
TMU	Traffic Management Unit
TRACON	Terminal Radar Approach Control
UHF	Ultra High Frequency
UPS	Uninterrupted Power Supply
VFR	Visual Flight Rules
VHF	Very High Frequency
VSBP	Voice Switch By-Pass
WMT	Work Management Tool (Web Scheduler)
WSA	Wind Shear Alert
ZID	Indianapolis Air Route Traffic Control Center

Chapter 2. Supervision

Section 1. Security Monitoring

2-1-1. INFORMATION

Perimeter fencing and security cameras provide a layered system of security to the Air Traffic Control Building. Camera still shots of the parking lot gate, pedestrian gate, breezeway door and rear entrance door are available. There are four monitors/control boxes that access these cameras. The monitors/control boxes are located in the Technical Operations Administrative Office, the Air Traffic Administrative Office, the Operational Supervisor's desk in the TRACON and in the Control Tower.

2-1-2. PROCEDURES

a. During Administrative hours, control of the security cameras and access to the parking lot gate and entrance doors is delegated to the Tech Ops Administrative Officer. The Tower monitor may be turned off.

b. After Administrative hours or in the absence of the Tech Ops Administrative Officer, the TRACON shall be delegated control of the security cameras and access gate/door switches. The OS or the CIC must push the button associated with the gate/door wishing to be accessed and then push "**Talk"** to access voice communications at exterior doors and gate. The **"Door Release"** button must be pushed to open the gate/doors. The **"Off"** button should be pressed after communications are completed.

c. When the Tower is in sole operation of the facility, control of the security cameras and access door/gate switches is delegated to the Tower. This delegation should return to the TRACON as soon as practical in the morning as staffing permits. The OS/CIC must push the button associated with the gate/door wishing to be accessed and then push **"Talk"** to access voice communications at exterior doors and gate. The **"Door Release"** button must be pushed to open the gate/doors. The **"Off"** button should be pressed after communications are completed.

d. Programming of cameras is an administrative function and any recommendations to improve the coverage areas should be forwarded to the administrative offices.

Chapter 3. Equipment

Section 1. STARS

3-1-1. STARS EQUIPMENT

The following information prescribes procedures to be utilized with the Standard Terminal Automation Replacement System (STARS) and associated equipment. STARS equipment includes the following components:

a. Terminal Controller Workstation (TCW)

b. Tower Display Workstation (TDW)

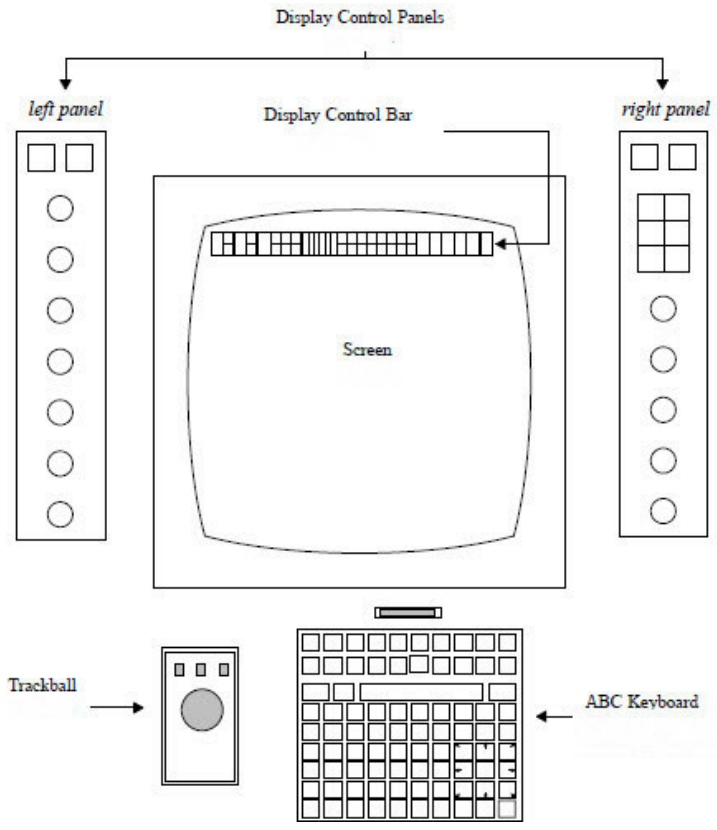
c. Supplemental Display Monitor (SDM)

d. Keyboard

e. 3-button Trackball

3-1-2. TCW/TDW HARDWARE

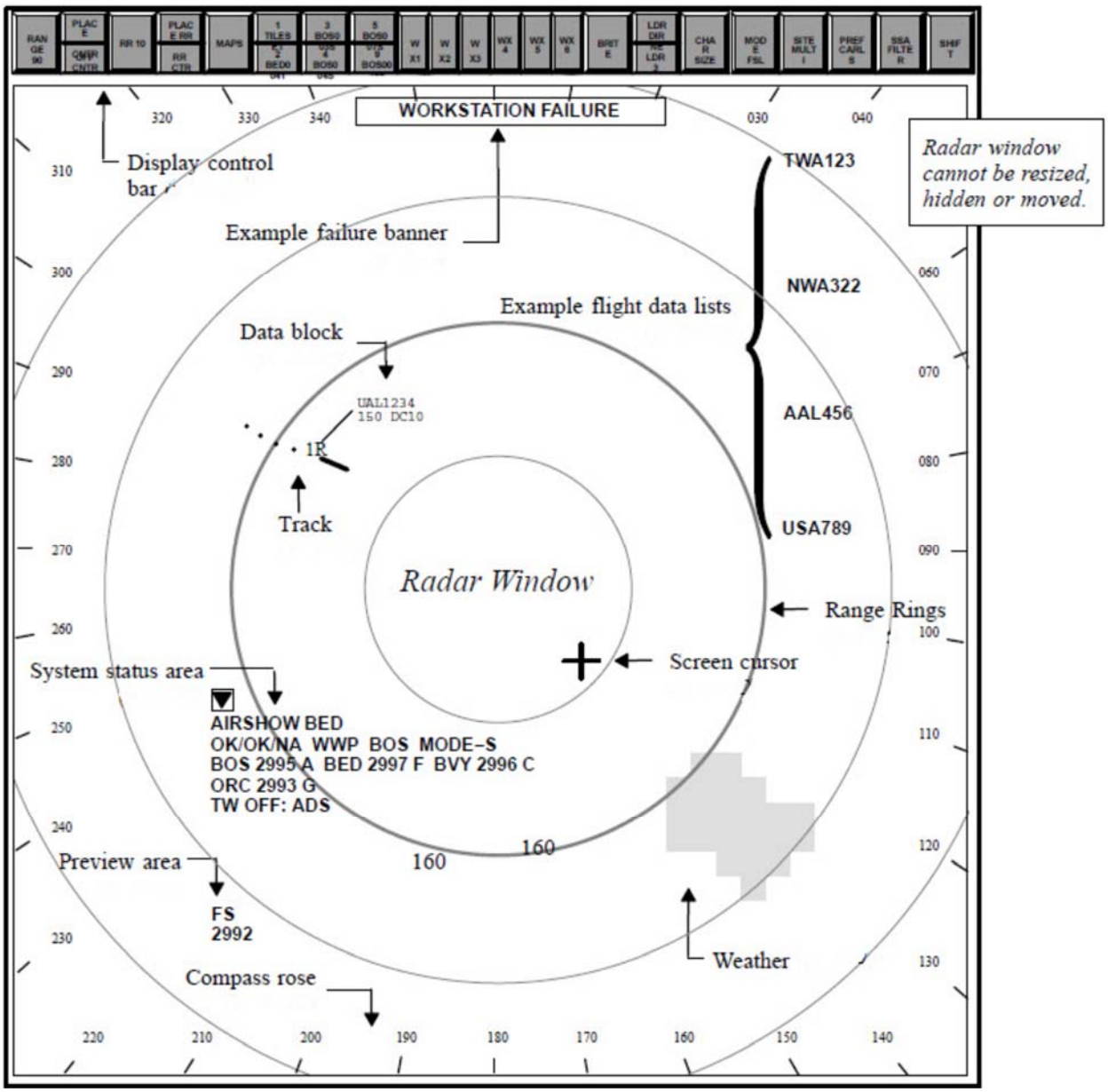
Fig. 3-1-1



Tbl. 3-1-1

Hardware/Component	**Description**
Display Control Panels	There are two control panels, the left control panel and the right control panel. The left panel includes the Full Service Level (FSL) and Emergency Service Level (ESL) selection switches and is used to adjust the brightness of screen graphics, the backlit control panel, and adjust track history length. The right control panel is used to initiate and adjust various controller functions such as leader lines, font size, the display of maps, the display center (pan function), range, range ring interval, and the display of plots.
Display Control Bar	Presents selectable on−screen buttons that initiate controller functions. The layout of the control bar and available functions are slightly different for the TDW and TCW. Some buttons cause a submenu of buttons to appear, for example, <BRITE> and <MAPS>. Selecting <SHIFT> displays an additional bar of selectable functions. The display of the control bars can be toggled on and off using the <DCB> function key on the keyboard.
Trackball	Controls the position of the cursor and is used to select tracks, identify locations on the screen, and to select Display Control Bar buttons. The three buttons (left, center, and right) have the following general behavior: **Left**: Selects tracks, on−screen locations, and Display Control Bar buttons. **Middle**: Used to highlight a track as described for the command "Toggle track highlight (Implied command)" **Right**: Performs no function

Fig. 3-1-2



Tbl. 3-1-2

Screen/Component	Description
Radar Window	Shows a sector's airspace and the airspace surrounding the sector covered by this TCW/ TDW with graphical symbols that represent the present location of target aircraft.
System Status Area	Shows current information including: time, selected range, assigned Terminal Controller

	Position(s) (TCPs), altitude filter limits, weather history data, selected beacon code blocks, PTL value, radar mode, and catastrophic system error messages.
Preview Area(s) (up to 3)	There are up to three (3) Preview Areas, each associated with a corresponding keyboard. Each Preview Area displays controller input from its associated keyboard, as well as command responses and error messages.
Flight Data Lists	Lists logically related flight data of interest to the controller. By name, the flight lists could be (depending on adaptation data): Coast/Suspend List (for coasting and suspended tracks), VFR FP List (for Visual Flight Rules flight plans), Arrival/Dep List (for arriving or departing traffic), Coordination list (for flights needing coordination), Tower lists, and the LA/CA/MCI list (for flights in emergency situations). Flight lists or their titles may or may not appear based on adaptation data.
Screen Cursor	Used to select specific targets and Display Control Bar buttons. Screen cursor movement is controlled by the trackball. For TCW/TDWs with multiple keyboards, there is a cursor for each keyboard and trackball.
Track	Identifies a detected aircraft's current location using a position symbol and information about the aircraft in an attached data block. Optionally, the track can include a history trail and predicted track line.
Data Block	Attached to a position symbol, the data block includes textual information about the aircraft including cleared and actual altitudes, speed, destination, aircraft type, aircraft category, beacon code, and Aircraft ID (ACID). Formats for data blocks are defined in adaptation data.
Compass Rose	Used to show direction. The compass rose is oriented to magnetic north. The appearance and display intensity of the compass rose can be controlled by brightness.
Display Control Bar	Selectable buttons on screen that initiate controller functions. These buttons are grouped by function in a toolbar configuration. The toolbar can be moved to

	the top, bottom, left side, or right side of the screen. Selecting the DCB button labeled <SHIFT> (or pressing the <SHIFT> keyboard button) displays the Auxiliary Display Control Bar which has buttons for additional controller functions. Any function that can be initiated using the trackball and control bars can also be initiated using the keyboard and function keys.
Failure Banner	A failure banner appears if either a failure of this workstation occurs, or sensor updates are no longer being received, or if this service level is declared unavailable by the MCP operator. In FMA mode, a failure banner may also be displayed if the surveillance sensor is failing. Where EFSL is configured as the Emergency Service Level, the failure banners can appear in EFSL under the same circumstances as they do for FSL.

3-1-3. OPERATIONAL USE

a. FUSED is the primary site selection.

NOTE-

FUSED, Single Sensor and Multi-Sensor modes are all products of the STARS Radar Data Processors (RDP's). FUSED, Single Sensor and Multi-Sensor modes will not be available if both of the RDP's fail. Direct Sensor Access (DSA) is the only backup in the event of a full STARS system failure and should only be utilized for short-term emergency transitioning procedures.

b. Definitions

1. FUSED- A "smoothed" display of targets that are generated from all available sensors, both ground based, Lexington (LEX), Lynch Long Range (QRI), Louisville/Standiford (SDF), and satellite based (ADS-B). Target updates occur every second and with the aid of a computer calculated positon, provide a target which appears to be constantly moving (not "jumping"). FUSED is the normal operating setting to be used when it is available.

2. Single Sensor- In this setting, the Radar sensor can be selected on an individual basis. Targets will be displayed in a "top hat" configuration (primary displayed in blue and the associated secondary beacon slash in green). STARS will still be receiving data from the other available sensors. LEX Radar in single sensor is preferred when FUSED is not available.

3. MULTI- Combines Radar input from 2 to 16 sites into a single picture utilizing a mosaic grid composed of radar sort boxes.

4. Direct Sensor Access (DSA)- DSA utilizes a raw radar feed from a single sensor (selectable) and displays only primary and secondary radar data with no automation interface (since there is no position symbol, targets cannot be tagged). DSA is a backup only to be used when both STARS Radar Data Processors fail.

5. TRK on a data tag indicates radar tracking is not sufficient; aircraft must be advised "radar contact lost."

6. ISR on a data tag during FUSED mode indicates the aircraft is beyond the 3nm base separation requirement or the system is receiving no Mode-C from the aircraft. When the system loses a Mode-C readout, the system is unsure of the aircraft parameters and reverts to ISR. When you receive an ISR data tag:

   (a) 5nm separation between aircraft is required.

   (b) 5nm MVA map must also be used.

   (c) Course divergence for passing or diverging courses separation must be 45 degrees.

   (d) If an unexpected ISR displays when an aircraft is on final approach and there is a safety benefit to continue on a stabilized approach, allow the aircraft to continue the approach even if separation is less than 5nm.

   (e) If an ISR is triggered by loss of Mode-C and the controller enters the pilot's reported altitude in the data block, the ISR will go away.

c. Contingency Plan- Declare ATC Alert when the LEX sensor or QRI sensor is out of service.

3-1-4. RADAR SITE/MODE SELECTION

a. The OS/CIC is responsible for the selection of an appropriate radar site. Each CPC should ensure their site conforms to this selection. OS/CICs the following sites have been prioritized according to available coverage:

   1. FUSED

   2. LEX (Lexington ASR-11)

   3. MULTI

      NOTE-

      Multi mode should only be used when Fusion and the LEX ASR-11 are out of service. MULTI mode requires increased separation standards.

   4. QRI (Lynch ARSR)

5. SDF (Louisville ASR-9)

b. The OS/CIC must be notified if any radar sensor or ADS-B site appears in alert status in the System Status Area (SSA). Text will appear in red with the name of the site that has failed.

3-1-5. SINGLE SENSOR LEX ASR-11

Standard separation may be used IAW 7110.65 when LEX ASR-11 is the single site selected.

3-1-6. LEX RADAR OUT OF SERVICE

When the LEX ASR-11 is not available in FUSION Mode or as a single sensor, take the following precautions:

a. Increase separation to 5nm when ISR is displayed in the data block.

b. Passing or divergence require 45 degrees.

c. Suspend ARPs and APREQ all IFR Departures.

d. Provide downtimes on IFR Arrivals.

e. Do not vector departure aircraft below the MVA and utilize the 5nm MVA map for all aircraft.

f. Apply non-radar separation to successive departures (1 minute rule).

g. Notify Tech Ops. personnel.

h. Ensure a NOTAM is issued.

i. Broadcast on the ATIS: "Primary radar out of service. VFR services are available to aircraft with transponders and are limited to safety alerts, traffic advisories, and sequencing to Lexington Airport."

j. Notify adjacent facilities that LEX ASR-11 is OTS and 5nm separation is required.

k. Non-radar separation standards must apply in all areas of non-coverage.

l. VFR Arrivals: Radar positions will attempt to provide Class “C” services to the extent practical. If radar coverage does not permit this, radar positions must instruct aircraft to contact LC for sequence.

m. VFR Departures: If radar contact is not established, aircraft will be instructed to report exiting Class “C” airspace.

3-1-7. FSL/DSA MODE

After exhausting the site selection list, if the radar presentation is inadequate, DSA mode may be selected. Direct Sensor Access (DSA) is the only backup in the event of a full STARS system failure and should only be utilized for short-term emergency transitioning procedures.

3-1-8. VIDEO MAP LIST

The following table contains a comprehensive list of available maps for use.

Tbl. 3-1-3

Map Number and Name	What is Displayed
Map 1- 3MVA	3nm MVA
Map 2- 27K	27K Approach Overlay
Map 3- SAT RNV	Satellite RNAV Approaches
Map 4- NON RNV	Satellite Non-RNAV Approach Overlay
Map 5- TWR_RJC	Tower Airspace, Special Approach Overlay
Map 6- EMER	VFR Emergency Map
Map 7- RNV9-27	RNAV Runway 9/27 Approach Overlay
Map 8- RNV22	Runway 22 Final Airspace and RNAV Fixes
Map 9- RNV4	Runway 4 Final Airspace and RNAV Fixes
Map 10- 5MVA	5nm MVA
Map 101- 101 Base	Base Map
Map 12- FIXES	Fix Names
Map 13- Airways	Victor Airways and VORs
Map 14- JET-RTE	Jet Intersections
Map 17- Stadium	Stadiums
Map 119- SJRNAV	St. Joseph Hospital East RNAV Final
Map 120- STJOHOS	St. Joseph Hospital East RNAV Final with Fix Names
Map 121- NE_OP	Base map only showing Rwy 4 Loc.
Map 122- SW_OP	Base map only showing Rwy 22 Loc.
Map 123- Class_C	LEX Class C Airspace
Map 124- BNDRY	Adjacent Facility Boundaries
Map 125- VOR_A	LEX VOR_A Only
Map 126- County	KY County Map

Section 2. Reserved

Chapter 4. Operating Procedures

Section 1. Class C

4-1-1. DIMENSIONS

LEX Class C Airspace consists of two concentric circles. The surface area is defined by a 5-mile radius circle, centered on the airport, which extends vertically from the surface to 050. The outer circle is a 10-mile radius circle that excludes the surface area and extends from 022 to 050.

The LEX Class C Outer Area complies with the definition outlined in the Pilot/Controller Glossary.

4-1-2. CLASS C VIOLATORS

The OS/CIC, to the maximum extent possible, will attempt to track and identify Class C violators.

Section 2. Tower/TRACON Layout

4-2-1. TOWER LAYOUT

The following figure depicts the tower layout:

Fig. 4-2-1

4-2-2. TRACON LAYOUT

The following figure depicts the TRACON layout:

Fig. 4-2-2

TRACON

Section 3. Flight Progress Strips

4-3-1. FPS

The following figures depict appropriate strip marking for use at every control position:

Fig. 4-3-1

FSP GENERATED STRIPS

1 2 2A	5	8	9		10	11	12
3	6				13	14	15
4 4A	7		9A	9B	16	17	18

Box	Information
1	Aircraft Identification
2	FSP Revision Number
2A	A large D to indicate a reportable delay.
3	Number of aircraft / type / equipment suffix
4	Computer Identification Number
4A	Departure frequency / sector assigned
5	Beacon Code

IFR DEPARTURES

6	Proposed departure time
7	Requested altitude
8	Departure airport, B7/B8 circled as required
9	Route of Flight, Destination (box destination requiring CFR-optional), Altitude assignment
9	PDR – Check mark when issued
9A	FRC boxed - check marked when issued
9B	Departure runway or runway intersection
10	Release Time (departure delays)
11	ATIS Code / WX for departure information issued
12	Clearance issued (check mark)
13	Departure Delay Start Time
14	EDCT
15	Departure Delay End Time

JIA508 CRJ2/Q D 682 E	3436 P2215 350	LEX B8	KLEX AZQ HMV JOHNS2 KCLT FRC 22		@ 2245 2220	W	✓ 2245

Fig. 4-3-2

IFR ARRIVALS

1 Aircraft Identification
2 FSP Revision Number
3 Number of aircraft/type/equipment suffix
4 Computer Identification Number
5 Beacon Code
6. Previous inbound Fix/Airway
7. Previous Coordination Fix
8. Estimated time of arrival over coordination fix
9. Altitude (Remarks/Type of Instrument approach and Missed Approach optional)
9A. Destination airport
17 Time aircraft changed to advisory/UNICOM frequency or radar contact lost

SKW4629	4217	A1553	IFR ILS E			
CRJ2/L	HYK		110 100 32			
682	LEX		LEX			

IFR OVERFLIGHTS

1 Aircraft Identification
2 FSP Revision Number
2A Strip request originator
3 Number of aircraft/type/equipment suffix
4 Computer Identification Number
5 Beacon Code
6 Coordination Fix
7 Overflight Coordination indicator
8 Estimated time of arrival over coordination fix
9 Altitude, Route of flight, Remarks. (Optional Bold "V" to indicate overflight)

ASQ5183	3527	E2200	250 100			
CRJ7/L	DARBY		KATL./.HCH.DARBY4 KSDF			
894	SDZ					

Fig. 4-3-3

IFR PRACTICE APPROACHES

1 Aircraft Identification
2 FSP Revision Number
2A Strip request originator
3 Type aircraft/equipment suffix
5 Beacon Code
9 IFR
9 Altitude, (Type of approaches requested -optional)
9.A Destination airport

N220TB	4217	A1553	IFR			ILS E			
BE20/T			~~110~~	~~60~~	32	VOR A			
682	LEX		LEX						

IFR SATELLITE PRACTICE APPROACHES

1 Aircraft Identification
2 FSP Revision Number
2A Strip request originator
4 Type aircraft/equipment suffix
5 Beacon Code
9 IFR
9 Altitude, (Type of approaches requested -optional)
9.A Destination airport

N220TB	4217	A1553	IFR			RNAV RY7			
BE20/T			~~110~~	~~60~~	30				
682	FFT		FFT						

Fig. 4-3-4

SPECIAL VFR DEPARTURE

1. Aircraft Identification
3. Type aircraft
4A. Departure Sector
5. Beacon Code
6. P Time
7. Requested Altitude
8. ARP Heading scanned to TRACON strip
9. Altitude, Special VFR clearance and requested on course heading
9B. Departure runway or runway / intersection circled for rwy 9/27
11. ATIS Code/WX for departure information issued
12. Clearance issued (check mark)
17. Requested on course heading (TRACON FPS)

TOWER FPS

Z34A		4542		LEX HYK 310		K	✓
		P2328		30			
PA28	W	VFR/25		27			

TRACON FPS

Z34A		4542		LEX HYK			
		P2328	270				
PA28	W	VFR/25				310	

SPECIAL VFR ARRIVAL

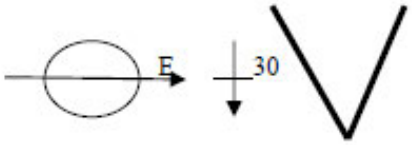
1. Aircraft Identification
3. Type aircraft
5. Beacon Code
6. Aircraft's position
9. Special VFR Clearance, Altitude
9A. Destination airport

Z34A		0247					
PA28		10W		W 25			
				LEX			

Fig. 4-3-5

SPECIAL VFR OVERFLIGHT

1. Aircraft Identification
3. Type aircraft
5. Beacon code
6. Aircraft's position
9. Special VFR Clearance, Altitude
9. Optional bold V to indicate an overflight

Z34A	0323					
PA28	20 W					

VFR ON TOP DEPARTURE

1. Aircraft identification
1. Type aircraft
4A. Departure Sector
6. P Time
7. Requested Altitude
8. ARP Heading scanned to TRACON strip
9. On Top Clearance limit/destination
9A. Altitude Restrictions
9B. Departure runway or runway intersection circled for rwy 9/27
11. ATIS code
12. Clearance issued (check mark)

N1234A	4017		LEX FFT		C	✓
PA28	P1255		30			
E	OTP/45		22/C			

Fig. 4-3-6

CLASS "C" DEPARTURE (with FLIGHT FOLLOWING)

1. Aircraft Identification
3. Type aircraft
4A. Departure Sector
5. Beacon code
6. P Time
7. Requested Altitude
8. ARP Heading scanned to TRACON strip
9. Route of Flight/Destination
9A. Assigned Altitude (Tower FPS)
9B. Departure runway or runway intersection circled for rwy 9/27 (Tower FPS)
11. ATIS Code/WX departure information issued (Tower FPS)
12. Departure instructions issued (check mark) (Tower FPS)

TOWER FPS

N12918	4570		LEX DWU		K	✓
PA28	P0036		30			
E	VFR/55		9			

TRACON FPS

N12918	4570		LEX DWU			
PA28	P0036	090				
	VFR/55					

Fig. 4-3-7

CLASS "C" DEPARTURE (NO FLIGHT FOLLOWING)

1. Aircraft Identification
3. Type aircraft
5. Beacon code
6. P Time
7. Requested Altitude
8. ARP Heading scanned to TRACON strip
9. Route of Flight/Destination Requested on course heading

9A. Assigned Altitude(Tower FPS)

9B. Departure runway or runway intersection circled for rwy 9/27 (Tower FPS)

11. ATIS Code/Wx for departure information issued (Tower FPS)
12. Departure instructions issued (check mark) (Tower FPS)
17. Requested on course heading (TRACON FPS)
18. Local area information (TRACON FPS)

TOWER FPS (depart local area)

Z62S	4570		LEX HYK 280		K	✓
PA28/A	P0036		30			
W	VFR/35		22			

TRACON FPS

Z62S	4570		LEX HYK			
PA28	P0036	270				
	VFR/35				280	

TRACON FPS (remain in local area)

Z6MA	4570		LEX HYK			
SR22/A	P0036	270				
	VFR/55					NPA

Fig. 4-3-8

CLASS "C" ARRIVAL

2. ACID underlined
3. Type aircraft
8. Departure airport if a satellite
9. Altitude
9A. LEX

Z34A	0325	FFT	30			
PA28			LEX			

CLASS "C" OVERFLIGHT

1. Aircraft Identification
3. Number of aircraft/type/equipment suffix
5. Beacon Code
6. Aircraft's position
9. Altitude, Remarks, (Optional Bold "V" to indicate overflight)
9A. Destination/Route

Z7CM	0247		20			
BE35	20W					
			AZQ			

VFR PRACTICE APPROACHS

1 Aircraft Identification
3. Type aircraft
9. Type of approaches requested (optional)
9.A Destination airport, Altitude

203			ILS E			
C172			~~32~~ VOR			
			LEX			

Fig. 4-3-9

VFR SATELLITE PRACTICE APPROACHES

1 Aircraft Identification
3. Type aircraft
9. Type of approaches requested (optional)
9.A Destination airport, Altitude

203			LOC RY25			
C172			30			
			FFT			

TOUCH AND GO'S

1. Aircraft identification
3. Type aircraft
9. L followed by tally marks for each arrival and departure to be recorded as Locals
9. "T&G" indicates local Touch and Go pattern. T&G is not added into the arrival/departure count.
9B. Departure runway or runway intersection
11. ATIS code

Z1234A			L - 1111		C	
PA28			T & G			
			22/C			

Section 4. Interphone Communication

4-4-1. GENERAL

The IVSR should be used as the primary means of intra-facility coordination between all operating positions.

4-4-2. PROCEDURES

a. When initiating an override, the initiating controller must listen to determine if the receiving controller is talking to an aircraft or on a landline. If not, the initiating controller must state the position they are calling followed by the position they are calling from. For

EXAMPLE-

Local, East Apreq.

b. Only use the first name of the position being called such as East, Local, Ground, Data, etc.

NOTE-

These procedures apply to all controllers, operations supervisors, and support specialist when working an operational position.

4-4-3. CIRCUIT IDENTIFICATION AND LOCATION

Tbl. 3-2-1

Line	Circuit ID	Facility/Sector	Shout Line
CVG Line		LEX/CVG Handoff	Voice
SDF Line		LEX/SDF Handoff	Voice
ZID Line		LEX/ZID Handoff	Voice

Tbl. 3-2-2

Line	Circuit ID	Facility/Sector	Dial Line
76 Line		SDF TRACON	30
		SDF Tower	32
		CVG TRACON	33
		CVG Tower	34
		LEX TRACON	35
		LEX Tower	36
		LOU AFSS	37

Tbl. 3-2-3

Line	Circuit ID	Sector	Dial Line
84 Line		ZID Supervisor	22
		ZID RIV Sector	35
		ZID ABB Sector	40
		ZID LEX Sector	42
		ZID EVV Sector	44
		ZID LOZ Sector	45
		ZID AZQ Sector	46
		LEX Tower (CD)	56
		LEX TRACON (RD)	57
		ZID Data Systems	66
		ZID TMU	70/99
		Meteorologist	98
		ZID Military/ELT	75

Tbl. 3-2-4

Line	Circuit ID	Facility/Sector	Dial Line
ARTS (IDAT)		LEX/ZID	T1/T2 Line
FDIO (FDAT)		LEX/ZID	T1/T2 Line
FFT RCO		FFT	118.1 FFT
27K RCO		27K	127.425 27K
LEX Airport	4-Digit Dial		1225
Commercial Line		PBX	
Fax		PBX	

Section 5. Position Relief Briefings

4-5-1. GENERAL

a. The position relief-briefing checklist is located on position clipboards and must be used for every position relief briefing conducted.

b. All position relief briefings must be recorded utilizing the IVSR.

c. The primary source of general information pertaining to position relief is the SIA contained in the IDS. The statement "Pre-Briefed" means the relieving controller has reviewed the Pre-Brief items as listed on the position relief briefing checklist and the following SIA data on the IDS pages. The following pages IDS pages contain information pertinent to position relief breifings:

Page #	Contents
0200	ATIS, Weather, Flow, and Pertinent Information
0199	LEX NOTAMS

0198 Satellite NOTAMS

d. RD and SI positions do not require the two-minute plug in overlap time.

4-5-2. PROCEDURES

The following procedures must be used by all operation personnel at all positions:

a. CPC relieving a CPC

1. The relieving CPC must assume the position for monitor purposes jointly with the CPC to be relieved.
2. After the relieving CPC takes control responsibility, the relieved CPC must remain plugged into the position for a minimum two-minute overlap to ensure that the position relief briefing has been accomplished. After the minimum two minutes has elapsed, the relieved CPC must record on the "brief" line their operating initials to finish the overlap.

b. Training Team relieving a CPC

1. OJTI plugs into the monitor jack at the position to be relieved.
2. Developmental plugs into another position (CI or CC) preferred) and monitors the positions to be relieved.
3. The relieved CPC must remain plugged into another position, monitoring the relieved position, for a minimum two-minute overlap to ensure that the position relief briefing has been accomplished. After the minimum two minutes has elapsed, the relived CPC must override the relieved position and state their operating initials to finish the overlap.

c. Training Team relieving Training Team

1. Relieving OJTI and Developmental plug into another position (CI or CC preferred) and monitors the position to be relieved.
2. After the relieving OJTI indicated he/she is ready to assume control responsibility, the two Developmentals switch positions and the OJTIs switch positions.
3. The relieved CPC must remain plugged into another position, for a minimum two-minute overlap to ensure that the position relief briefing has been accomplished. After the minimum two minutes has elapsed, the relieved CPC must override the relieved positon and state their operating initials to finish the overlap.

d. CPC relieving a Training Team

1. Relieving CPC plugs into another position (CI or CC preferred) and monitors the position to be relieved.

2. After the relieving CPC indicates he/she is ready to assume control responsibility, the Developmental unplugs and the relieving CPC plugs into the position with the controller being relieved.

3. The relieved CPC must remain plugged into the position, monitoring the relieving controller, for a minimum two minute overlap to ensure that the position relief briefing has been accomplished. After the minimum two minutes has elapsed, the relieved CPC must override the relieved position and state their operating initials to finish the overlap.

Section 6. Opposite Direction Procedures

4-6-1. ODO

An Opposite Direction Operation (ODO) is defined as an IFR/VFR operation conducted to the same or parallel runway where an aircraft is operating in a reciprocal direction of another aircraft arriving, departing, or conducting an approach.

ODO's may only be conducted when an operational necessity exists for the pilot and/or an emergency situation exists.

a. General- Applies to all ODO.

1. The Tower OS/CIC and the TRACON OS/CIC must be advised when an opposite direction operation is being conducted and/or requested.

2. The TRACON OS/CIC must monitor the ODO via the IVSR.

3. All coordination between control positions must be on a recorded line.

4. As a memory aid, RE/RW/RF must enter the runway assignment in the scratch pad of an arrival conducting an ODO.

5. As a memory aid, LC must display the ODO Runway Memory Aid Device (RMAD) until the ODO is complete.

6. Traffic Advisories are required to both aircraft.

EXAMPLE-

Opposite direction traffic (distance) mile final (type aircraft).

Opposite direction traffic departing runway (number), (type aircraft).

Opposite direction traffic, (position), (type aircraft).

b. These procedures outline same runway opposite direction operations at Lexington Blue Grass Airport when either of the aircraft are receiving **IFR** separation services.

1. The provisions of FAA Order JO 7110.65, paragraph 7-2-1, Visual Separation, cannot be applied when conducting same runway opposite direction operations.

2. Exceptions to these requirements are granted for emergency aircraft only.

3. Cutoff points are defined as:

(a) CAT I arrival/departure and a CAT I arrival- 5 mile final.

(b) All others- 10 mile final

(c) For aircraft on downwind, do not turn base until the departure is airborne and turning to avoid a confliction or the arrival aircraft crosses the landing threshold.

4. Opposite Direction Departures:

(a) GC must advise SC of an opposite direction request.

(b) LC must initiate verbal coordination for opposite direction departures with the appropriate sector by stating the callsign, type departure runway, and the words "opposite direction." The radar sector issuing the release must notify all other radar sectors of the release departure.

(c) LC must not request the opposite direction release until the flight progress strip has been scanned and the aircraft is holding short and ready for takeoff.

(d) The radar controller issuing the release must advise SI of the opposite direction request.

(e) The radar controller issuing the release must ensure the departure is radar identified and turned to avoid all conflictions before the opposing arrival reaches the appropriate cutoff point. If it appears an arrival aircraft may cross the cutoff point, the radar controller must issue control instructions to re-sequence the arrival prior to the aircraft reaching the cutoff point. The radar controller must protect the integrity of the cutoff points as well as maintain standard separation between all aircraft and terrain.

5. Opposite Direction Arrivals:

(a) RE/RW must advise the SI of an opposite direction request.

(b) RE/RW must initiate coordination for opposite direction arrival request from LC by stating the aircraft call sign, type, arrival runway, and the words "opposite direction."

(c) LC must advise SC of opposite direction request.

(d) LC must APREQ all departures, regardless of runway, after an opposite direction arrival has been approved with the appropriate radar sector. The radar sector issuing the departure release must notify all other radar sectors of the released departure.

(e) The radar controller issuing the release must ensure the departure is radar identified and turned to avoid all conflictions before the opposing arrival reaches the appropriate cutoff point. If it appears an arrival aircraft may cross the cutoff point, the radar controller must issue control instructions to re-sequence the arrival prior to the aircraft reaching the cutoff point. The radar controller must protect the integrity of the cutoff points as well as maintain standard separation between all aircraft and terrain.

(f) LC must ensure pattern traffic is turned to avoid all conflictions before an opposite direction arrival reaches the appropriate cutoff point.

(g) For opposite direction operations involving 2 arrival aircraft, radar must ensure the first aircraft has crossed the runway threshold prior to the second aircraft reaching the appropriate cutoff point.

6. Recovery:

(a) If all else has failed and the arrival has crossed the cutoff point too soon, issue control instructions, such as assigning altitudes or issuing headings to maintain standard separation in the safest and most efficient way possible. Do not place non-participants in jeopardy or impact other operations unless safety is compromised.

c. These procedures outline same runway Opposite Direction Operations (ODO) at Lexington Blue Grass Airport when both aircraft are **VFR.**

1. LC must initiate verbal coordination for ODO with the appropriate Radar sector by stating the call sign, type, departure runway, and the words "VFR opposite direction." The radar sector issuing the release must notify all other radar sectors of the released departure.

2. LC must ensure a turn is issued to avoid a conflict with opposing traffic. Both aircraft must be on LC frequency unless the VFR arrival is more than 10 flying miles from the airport.

3. LC may apply the provisions of FAA Order JO 7110.65, paragraph 7-2-1, Visual Separation when conducting same runway ODO when both aircraft are VFR.

Section 7. Position Relief Checklists

4-7-1. Controller Position Relief Checklists

a. TOWER POSITION RELIEF

Pre-Brief

a. IDS SIA: Pages 0198, 0199, 0200

b. Equipment: NAVAIDs, radar, ASOS, altimeter, etc.

c. Flow control: Ground stops, EDCTs, CFRs, etc.

d. Training

Briefing

a. Verbally state runway status: unavailable, closed, occupied.

b. Weather: PIREPs, trends, etc.

c. Airport conditions/activities: vehicles, mowing, snow removal, etc.

d. Special instructions/restrictions

e. Communication status/traffic

1. Vehicles/aircraft on runway

2. Pointouts, aircraft standing by

b. TRACON POSITION RELIEF

Pre-Brief

a. IDS SIA: pages 0198, 0199, 0200

b. Equipment: NAVAIDs, Radar, ASOS, Altimeter, etc.

c. Flow control: Ground Stops, EDCTs, CFR, etc.

d. Training

Briefing

a. Verbally state runway and approach status

b. Weather: PIREPs, trends, etc.

c. Special instructions/restriction: ODO, TFRs, etc.

d. Communication status/ Traffic

1. Aircraft released, not airborne

2. Satellite arrivals IFR not cancelled

3. Primary only targets

4. Coordination agreements

5. Pointouts

6. Aircraft standing by, etc.

4-7-2. Supervisory Positions and Ancillary Checklists

a. TOWER OS/CIC POSITION RELIEF

Pre-Brief

a. IDS SIA

b. Equipment: NAVAIDs, Radar, ASOS, etc.

c. Altimeter, weather/trends: SIGMETs, PIREPs

d. Flow control: Ground stops, EDCTs, etc.

e. Training

Briefing

a. Verbally state runway status: unavailable, closed, occupied

b. Airport conditions/activities: Vehicles, mowing, snow removal

c. Special instructions/restrictions

1. Training

2. Staffing: TOP, employees assigned duties

d. Communication Status:

1. Point Outs

2. Vehicles/aircraft on runway

3. Aircraft standing by

b. TRACON OS/CIC POSITION RELIEF

a. IDS Status Information Area

b. Equipment: NAVAIDS, RADAR, Beacon, etc.

c. Weather/altimeter trends, PIREPS, SIGMETS, CWA.

d. NOTAMS: LEX and Satellites.

e. Traffic level, Restrictions, and Special Operations.

f. Staffing:

1. TOP
2. Employees assigned other duties
3. Employees on leave
4. Leave requests
5. Certify shifts in Cru-Art

c. OS/CIC WATCH

a. Test MSAW alarm on the TCWs & TDW (F7 ZA)

b. Ensure ASOS OID signed on

c. Compare DASI to ASOS altimeter, report difference to T. Ops

d. Verify STARS time setting matches system clock

e. Verify STARS altimeter setting matches the DASI

f. Verify 121.5 & 243.0 monitored at RF & CD

g. Obtain and print Terminal Area Forecast (TAF) for LEX.

h. NOTAMS: Ensure accuracy by cross checking

1. FAA PilotWeb Site
2. 7230-4 Daily Log
3. IDS
4. Print current NOTAMS

i. **Once a day**

1. Crash Phone test
2. Check tower and TRACON cell phones

j. **Once a week (Weds)**

1. PET 2000 and VSBPs (Red Boxes) radio checks each Wednesday.
2. 7230-4 Daily Log entry for PETs and VSBPs
3. Check 121.5/243.0 TX/RX on IVSR

k. **Once a month (1st of the month)**

1. Currency Dashboard
2. Check SAWS altimeter against ASOS (must be within .02)
3. Post correction factor in IDS.

d. PLANNED EQUIPMENT OUTAGE

a. Active runway

b. Traffic volume and complexity

c. Weather/forecast weather

d. Availability of backup equipment

e. NOTAMs

f. Notify ROC & ZID, SDF, CVG as needed

g. 7230-4 Daily Log entry

e. TOWER RUNWAY CHANGE

a. OS/CIC determines active runway(s)

b. OS/CIC coordinates with TRACON OS/CIC

c. Verify last arrival/departure aircraft

d. Notify all Tower personnel

e. Equipment changes

1. ILS
2. LLWAS
3. MALSR
4. REIL
5. Lighting panel-landing rwy
6. RVR ON when rwy 4 active

f. Record new ATIS

g. Coordinate release of departures off new runway

f. TRACON RUNWAY CHANGE

a. OS/CIC coordinates with Tower

b. Verify last arrival/departure aircraft

c. Notify all TRACON personnel

d. Update IDS with new runway

e. Coordinate release of departures off new runway

f. Log runway change on Daily Log 7230-4

g. RUNWAY OPENING/CLOSING

a. Verify runway opening/closure through published NOTAMs

b. Identify last arrival/departure for a pending closure or first arrival/departure for a pending opening and coordinate with TRACON

c. Ensure airfield lighting is selected for the proper configuration

d. Ensure correct NAVAIDs are selected for runway in use

e. Ensure RVR is ON when rwy 4 active

f. Ensure memory aids are used in accordance with LEX 7110.10

g. Ensure a new ATIS reflecting the new operating configuration is broadcast

h. Ensure an entry is made on the 7230-4 reflecting the closure/opening of the runway

Section 8. STARS Entries

4-8-1. NAS FLIGHT PLANS

To enter a VFR flight with a NAS generated beacon code (flight following outside LEX airspace) use the following format:

	EXAMPLE-
Aircraft ID	N12456
Departure Airport*Destination Airport	FFT*TYS
Type Aircraft	C172
Requested Altitude	055
Assigned Sector	E

4-8-2. LOCAL FLIGHT PLANS

To enter a VFR flight with a local generated beacon code (no flight following) use the following format:

	EXAMPLE-
Aircraft ID	456
Fix	HYK
Type Aircraft	C172
Requested Altitude	055
Assigned Sector	E

4-8-3. HELIPORT IDENTIFIERS

The following listing is the approved scratch pad entries for heliports in LEX airspace:

Tbl. 4-8-1

Name	**Y1 Scratch Pad Entry**
Central Baptist	CB
St. Joseph	SJ
St. Joseph East	SJE
University of Kentucky	UK
Blue Sky	SKY

Section 9. Line Up and Wait (LUAW) Procedures

4-9-1. LUAW

The general requirements for conducting LUAW are contained in FAA Orders 7110.65 and 7210.3. National and local requirements have been consolidated into this directive.

a. Procedures:

1. LUAW operations are authorized at LEX in accordance with the remainder of this paragraph.

2. Only 1 aircraft may be authorized to hold in position at a time.

b. Methods to assist the LC in maintaining awareness:

1. LC must use the strip holder marked "LUAW" as a memory jogger when LUAW is available. The flight progress strip of the aircraft holding in position must be placed under the "LUAW" strip holder.

2. LC must place the strip holder marked "NO LUAW" in the strip bay when LUAW operations are not authorized.

c. Consolidation and staffing:

1. LC must not be combined with any other position.

2. Staffing permitting, SC should not be combined with any other position.

d. Landing clearance:

LC is not authorized to issue a landing clearance to any aircraft while an aircraft is holding in position or authorize an aircraft to LUAW if an aircraft has been cleared to land on the same runway.

e. Runway geometry:

Converging Runways (RWY 4/22 RWY 9/27)

f. Time of day and weather:

1. LUAW at an intersection is only authorized between sunrise and sunset.

2. LUAW is not authorized any time the visibility is 1 mile or less.

g. Fleet mix:

There is no unique fleet mix at LEX that would impact LUAW procedures.

h. Traffic volume/ complexity restrictions:

None.

i. Obstructions or limitations to visibility from controller-to-aircraft and aircraft-to-aircraft:

None.

Section 10. Facility Best Practices

4-10-1. TOWER AND TRACON

The following items have been identified as facility best practices:

1. To the extent possible, Radar should ensure that a VFR aircraft has the field in sight prior to shipping it to the tower. If a VFR aircraft does not have the field in sight:

a. APREQ LC to hold on to the aircraft or

b. Advise LC if the aircraft does not have the field in sight, or is a student/low time pilot.

2. Turn off Runway 9/27 runway lights off when the runway is not being used.

3. Turn Runway 4/22 lights up to step 2 and leave Runway 9/27 runway lights on step 1 if both runways are in use.

Section 11. Practice Instrument Approaches

4-11-1. PROCEDURES

a. Approach control must identify aircraft conducting practice approaches to LEX by use of the left scratch pad in the following format:

Tbl. 7-5-7

First Character		Second Character	Third Character	
Alpha Character	**Approach Type**	/	**Alpha Character**	**Climb-out**
I	ILS		E	East ARP
R	RNAV	***NOTE-*** *Used to separate type of practice approach from instructions after conclusion of approach.*	W	West ARP
V	VOR		R	RWY Heading ALT 040
L	Localizer		P	Published Missed
9	RNAV 9		T	Tower Pattern
27	RNAV 27		F	Full Stop

NOTE-

The assigned runway must be in the scratchpad for ODO arrivals and VFR helicopters assigned a runway.

EXAMPLE-

"*I/W" would indicate an ILS Approach with a West ARP.*

"9/E" would indicate a RNAV RWY 9 Approach with an East ARP.

"7/W" would indicate a RNAV RWY 27 Approach with a West ARP.

b. For Count Ops purposes, approach control must identify aircraft conducting practice approaches at a satellite airport by entering "PLA" in Y1 or Y2.

4-11-2. CLIMB OUT INSTRUCTIONS LEX ARRIVALS

Issue the following climb out instructions to aircraft conducting practice IFR and VFR approaches to LEX.

a. Turbojet Aircraft- RH and 040

b. Non-Turbojet Aircraft-

Tbl. 7-5-8

Runway	Radar East	Radar West
RWY 4 or RWY 9	H090 and 030	H360 and 030
RWY 22 or RWY 27	H180 and 030	H270 and 030

Section 12. STARS Scratchpads

4-12-1. STARS SCRATCHPADS INFORMATION

STARS scratchpad information serves as the primary means of coordinating type aircraft and request. Operational personnel will utilize STARS scratchpads via the following means:

a. Enter aircraft type abbreviations as listed in FAAO 7360.1 in the H scratchpad for LEX arrivals.

b. Enter the airport identifier in the Y1 scratchpad for IFR/VFR aircraft landing at a satellite airport.

Y1 Scratch Pad	Meaning
Airport Identifier	Advertised approach/Satellite arrival
VA	Visual approach when not advertised
SFR	SVFR Aircraft
PLA	Satellite Practice Approaches
R27	Runway 27 Arrival
R9	Runway 9 Arrival
RED	Red Zone Aircraft
RJC	Lucas Field (79KY)
TAC	Tac Air Arrival
CB	Central Baptist Hospital
SJ	St. Joseph Hospital
SJE	St. Joseph Hospital East
UK	University of Kentucky Hospital
SKY	Blue Sky Refuel/ Maintenance

NOTE-

The assigned runway must be in the scratchpad for ODO arrivals and VFR helicopters assigned a runway.

Chapter 5. Clearance Delivery (CD)

Section 1. Area of Jurisdiction

5-1-1. CLEARANCE DELIVERY

Clearance delivery does not control movement areas or airspace.

Section 2. Position Information

5-2-1. EQUIPMENT LIST

a. STARS

b. IVSR

c. DASI

d. FSP

e. ATIS

f. IDS

g. LLWAS-RS

h. ASOS OID

i. SDM

j. SAWS

h. PET2000

Section 3. Frequencies

5-3-1. VHF

a. 132.35

b. Monitor 121.5

5-3-2. UHF

a. 257.8 (Shared with GC and LC)

b. Monitor 243.0

Section 4. Duties and Responsibilities

5-4-1. RESPONSIBILITES

a. Duties and responsibilities are IAW FAAO 7110.65, Terminal Radar Team Position Responsibilities.

b. Copy or post ATC clearances received from ZID. When the EFSTS is out of service, forward all departure strips to RD via the FDIO.

d. Transmit and receive FSP messages. Take prompt action to make proper distribution/notification on all revisions and remove strip messages.

e. Replace FSP forms as necessary.

f. Advise RD of all amendments to IFR/VFR departures made by CD or ZID when the EFSTS is out of service.

g. Enter requests for local IFR clearances into the NAS via the FDIO.

h. Forward flight progress strips to the GC position.

i. Coordinate with RD to ensure ATIS information posted to the SIA is accurate.

j. Manually enter Touch and Go count into the Count Ops program via the tower computer.

k. Disseminate tower visibility to affected position and ensure weather sequence is updated.

l. Coordinate with ZID TMU for release times on aircraft affected by traffic management initiatives. Enter the release times in box 10.

m. If the weather minimums are less than 5nm and the ceiling is less than 030 AGL, CD will inform LC of NO TAV. CD will also call RD to indicate NO TAV on the IDS4.

Section 5. Procedures

5-5-1. CLEARANCES/FPS

a. Prepare VFR and IFR Departure Strips utilizing approved strip marking as described in Chapter 4, Section 3. Review flight progress strips for accuracy and make necessary corrections and updates.

b. Issue ATC clearances.

1. Assign appropriate altitudes and departure frequencies in accordance with this manual and LOAs.

2. Departures must be assigned initial altitude as follows:

   (a) Turbojet/Turboprop: 6000' to 3000' as requested by the pilot

   (b) Prop: 3000'

3. The following frequencies will be assigned.

   (a) RE: 120.15/259.3

   (b) RW: 120.75/298.9

   (c) RF: 133.4

c. Draw a box around "FRC" on all departure flight progress strips. Place a check mark at the right side of the "FRC" after the full route clearance has been issued. Place a check mark next to the PDR after the preferred routing has been issued.

d. Enter VFR departures requesting flight following outside of Lexington Terminal Airspace or to a satellite airport within the terminal area into the NAS via the FDIO or a STARS F9 entry. Examples of STARS entries are located in Chapter 4, Section 8.

e. Enter VFR departures requesting to remain in or depart Class C airspace without further flight following into the NAS via the FDIO or a STARS F9 flight plan as follows. Examples of STARS entries are located in Chapter 4, Section 8.

1. HYK must be used as the destination airport.

2. Assign the RE keyboard to departures entering RE airspace.

3. Assign the RW keyboard to departures entering RW airspace.

4. Manually write the on course heading or other departure information in box 9 of the FPS.

NOTE-

Hand written departure strips may be used when radar operations are combined to the Tower.

5-5-2. ATIS

a. Update the ATIS message as required. Review the message for completeness and accuracy prior to transmission.

1. Include pertinent NOTAMs listed on the Lexington ATIS NOTAM IDS page in the current ATIS broadcast

2. Include unauthorized laser illumination events on the ATIS for one hour after the last report.

3. Include the statement, "Approaches are being conducted to converging runways" on the ATIS when visual approaches are conducted to Runways 4/9.

4. After review is accomplished, advise GC, LC, and RD of the ATIS code and the type of approach advertised if changed from previous broadcast.

NOTE-

Wind and altimeter information for ATIS broadcast will be taken from official ASOS weather observation.

b. Provide augmentation and backup for the ASOS as required.

c. Prepare and display a flight progress strip stating, "LLWS in effect," and the time advisories began. Low level wind shear advisories will be continued for 20 minutes.

d. Prepare and display a flight progress strip stating "Bird Activity Advisories," and the time advisories began. Bird activity advisories will be continued for 15 minutes.

e. Prepare and display a flight progress strip stating "UAS" and the time advisories began. UAS will be continued for 15 minutes.

5-5-3. COORIDNATION

a. Inform GC, LC, and RD when weather changes from VFR to IFR or from IFR to VFR.

b. Advise LC/GC of traffic flow restrictions.

c. Coordinate with LC prior to issuing a local SVFR clearance.

Section 6. Potential Problem Areas

5-6-1. DISTRACTIONS

As a part of the tower team, CD is responsible for eliminating distractions in the operational areas.

Chapter 6. Ground Control (GC)

Section 1. Area of Jurisdiction

6-1-1. GROUND CONTROL

Ground control is responsible for all movement areas at Lexington Airport with the exceptions of Runway 4/22 and Runway 9/27.

Section 2. Position Information

6-2-1. EQUIPMENT LIST

a. STARS

b. IVSR

c. DASI

d. IDS

e. LLWAS-RS

f. RVR

g. SDM

h. SAWS

i. PET2000

Section 3. Frequencies

6-3-1. VHF

121.9

6-3-2. UHF

257.8 (Shared with CD and LC)

Section 4. Duties and Responsibilities

6-4-1. RESPONSIBILITIES

a. Control all aircraft and vehicles within movement areas not released to LC for Taxiway A restricted aircraft or for Runway 9 departures/Runway 27 arrivals.

b. Scan the movement areas and work environment.

c. Notify SC of opposite direction departure requests.

d. Review flight progress strips for accuracy and make necessary corrections utilizing approved strip marking as described in Chapter 4, Section 3.

e. Ensure departures have received the latest information or current ATIS. Indicate ATIS was received by placing the current ATIS code in box 11. Indicate departure information was issued by writing "WX" in box 11.

f. Forward flight progress strips to LC in sequence for the assigned departure runway.

g. Notify ZID TMU when deicing operations begin and end.

h. Solicit PIREP information IAW FAAO 7110.65.

1. Forward PIREP information received from pilots to the tower OS/CIC.

2. Broadcast PIREP information to concerned aircraft in a timely manner.

i. Air Carrier operations are prohibited on Runway 9/27 and Taxiway B. Operations are also prohibited on Taxiway F, west of Taxiway F3.

j. Coordinate with LC for the following operations.

1. Helicopter Departures/Arrivals from Ramps and Taxiways

2. Intersection Departures

3. Taxi of aircraft during Red Zone Operations.

4. Control of Runway 27 Approach Area.

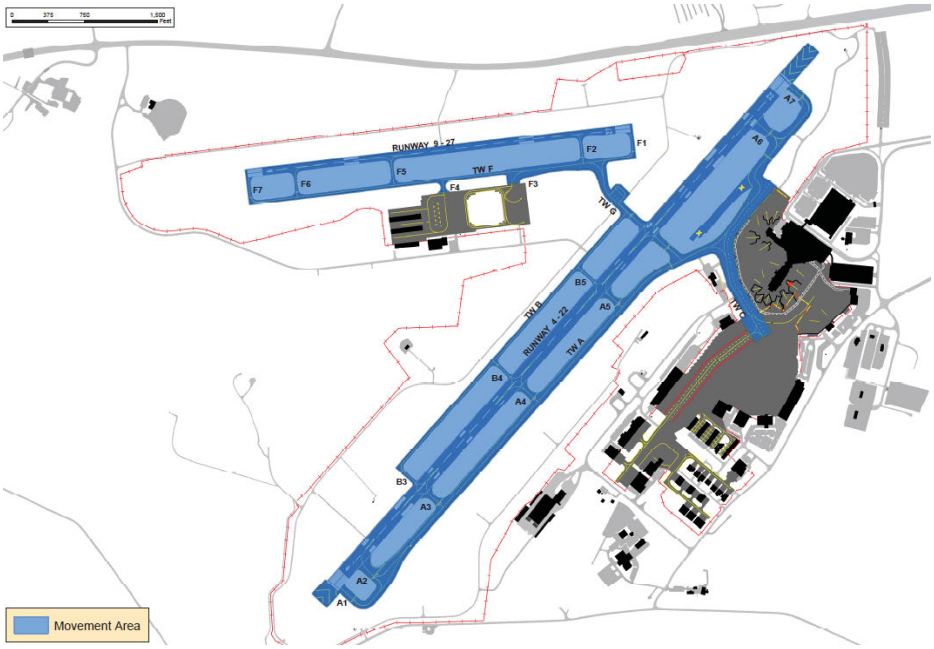
5. Opposite Direction Requests.

k. Inform SC if any departure experiences a delay of 15 minutes or greater.

6-4-2. MOVEMENT AREA

Figure 6-4-1 depicts the movement areas in blue.

Fig. 6-4-1



Section 5. Procedures

6-5-1. RUNWAY CROSSING COORDINATION

a. Ground Control must not clear any vehicle or aircraft on or along an active runway or taxiway released to LC without coordinating the following:

1. Type Operation (e.g. cross/proceed on)
2. Runway/Taxiway
3. Location
4. Aircraft Type/Vehicle Number

b. Ground Control must instruct vehicles/aircraft requesting authorization to proceed/taxi on or along an active runway when to contact tower.

c. Ground Control must scan the runway and final approach course to determine if the operation is feasible prior to requesting clearance to cross from Local Control.

d. The Ground Controller must make eye contact with (if coordination is not on an intra-facility line) and identify to the Local Controller the type equipment, runway, and location at which crossing will occur.

e. When receiving approval from Local Control for the crossing of a runway, the Ground Controller must visually scan the runway and final approach course again prior to crossing the runway.

f. Ground Control must notify Local Control when the runway is clear.

6-5-2. RED ZONE AIRCRAFT

a. Ground Control must release control of the designated portion of A (Taxiway A southwest of Taxiway G) to Local Control when in use by a Red Zone Aircraft. This is identified by an ILS Critical Area hold markings.

b. When Runway 4 is active and Red Zone Procedure are in effect, advise the OS/CIC when a restricted aircraft is ready to taxi.

c. Transfer communications and control of aircraft to LC prior to aircraft entering the Red Zone.

6-5-3. CLEARANCE READBACK

Controllers must obtain an acknowledgement and readback of any instructions/clearance, which authorizes any aircraft or vehicle to enter, cross, or hold short of an active runway.

6-5-4. STRIP MARKING

a. Write the assigned departure runway or runway/intersection in box 9B of the departure strip. Verbally notify LC of intersection departures.

b. For Runway 9/27 departures, circle the runway or runway/intersection.

c. Enter the departure delay start time in box 13 when an aircraft is delayed.

d. Write B7 or B8 in box 8 of the flight progress strip at the time the information is received from the pilot. Circle B7 or B8 upon approving a pushback operation at those gates.

6-5-5. RUNWAY 27 APPROACH/ RUNWAY 9 DEPARTURE

a. Display the "RWY 27 APPCH HOT" memory aid device when Runway 27 is active with arrival traffic or Runway 9 is active with departure traffic.

b. Taxi Runway 22 departures to the Runway 27 Approach Hold Line when Runway 27 is active with arrival traffic or Runway 9 is active with departure traffic.

PHRASEOLOGY

"RUNWAY 22, TAXI VIA (route), HOLD SHORT OF RUNWAY 27 APPROACH."

6-5-6. SILENT CROSSING

Notify Lexington Airport Operations when silent crossings are suspended due to LEX visibility being at or below 1/2 mile. When visibility increases above this threshold, a notification should also be made in order to permit resumption of this procedure.

6-5-7. SPECIAL USE AREA LOCATIONS

a. Hazardous Cargo- Approach end of Runway 9

b. Bomb Threat Area- Approach end of Runway 9

c. ILS Critical Areas- Hold lines at both runway ends meet requirements.

d. Red Zone Aircraft- Hold line at Taxiway A at Public Safety Building

e. Engine Run-Up Area- West GA Ramp

f. Charters, horse carriers, VIP, heavy jets, and DOJ- West or East GA Parking

g. Customs- East GA Parking

6-5-8. TAXIWAY A7

Taxiway A7 is closed to aircraft with wingspans more than 150ft.

EXAMPLE-

B767, B747, B777, B787, A330, and A380 all exceed this requirement.

NOTE-

A reference to wingspans can be found in the ADG description in this order's glossary.

Section 6. Potential Problem Areas

6-6-1. POTENTIAL PROBLEMS

a. Runway 27 arrivals can conflict with aircraft taxiing aircraft to Runway 22.

b. Multiple hold short lines for Runway 22 departures.

c. Meeting CFR times with an increase in the amount of traffic on final.

d. Taxi of aircraft in Red Zone.

6-6-2. AREAS OF NON-VISIBILITY

a. Taxiway C behind Concourse B.

b. Gate 22 behind Public Safety Building

c. Intersections A1 and A2 are not distinguishable.

d. Approach end of Runway 9 and F7 are not distinguishable.

6-6-3. RADIO BLIND SPOT

A radio blind spot exists near the approach end of Runway 4.

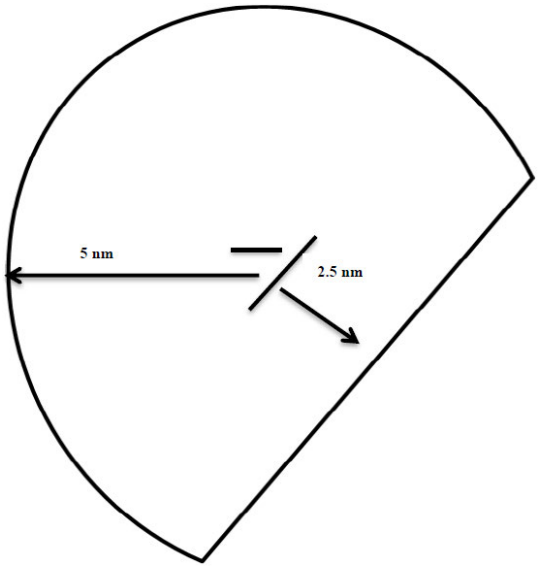
Chapter 7. Local Control (LC)

Section 1. Area of Jurisdiction

7-1-1. LOCAL CONTROL

LC is responsible for the airspace up to and including 3000' MSL within a 5NM radius of the ASR-11 antenna except, east of Blue Grass Airport the airspace is 2.5nm measured perpendicular to the ASR-11 site and parallel to Runway 4/22.

Fig. 7-1-1



Section 2. Position Information

7-2-1. EQUIPMENT LIST

a. STARS/TDW

b. IVSR

c. DASI

d. IDS

e. LLWAS-RS

f. LLWAS-RS DSD

g. RVR

h. RMADS

i. SAWS

j. PET2000

k. EFSTS

l. ASR-11 Control Panel

m. Tower Cell Phone

n. Engine Generator Uninterrupted Power Supply Monitor.

Section 3. Frequencies

7-3-1. VHF

a. 119.1

b. 120.15/120.75 are also available via the ECVS for Mid Operations.

7-3-2. UHF

257.8 (Shared with CD and GC)

Section 4. Duties and Responsibilities

7-4-1. RESPONSIBILITIES

a. Scanning of the runways and movement areas.

b. Sequence pattern traffic with radar arrivals within tower airspace.

c. Release departures in accordance with the Automatic Release Procedures.

d. Utilize Line Up and Wait (LUAW) Procedures located in Chapter 4, Section 9, when LUAW Procedures are authorized.

e. Review flight progress strips for accuracy and make necessary corrections.

f. Determine tower visibility and forward that information to Clearance Delivery for dissemination.

g. Ensure exiting aircraft are not impeded by other aircraft or vehicles on adjacent taxiways.

h. Solicit and disseminate PIREP information.

1. Forward PIREP information to SC.

2. Ensure relevant PIREP information is relayed to aircraft in a timely manner.

i. Advise SI if the engine generator (EG) indicates on or if the EG UPS goes into alarm on the airport lighting panel.

j. Use of Tower Display Workstation, IAW 7210.3, 10-5-3.

k. Ensure STARS Data Tag auto-acquires within 3-5 nm of the departure runway. If the tag does not auto-acquire, LC must coordinate with the appropriate radar sector.

l. Ensure that VFR departures on local beacon codes are not switched to departure prior to the STARS data block auto-acquiring on the appropriate data tag.

m. LC must utilize the TDW to determine the arrival sequence by quick looking arrival aircraft.

n. Use LLWAS-RS DSD to select the appropriate Ribbon Display Terminal configuration based on active runway.

o. LC will provide visual separation with all aircraft inside the lateral confines of the LEX Class-C Surface Area (Inner 5nm Ring), if the visibility is greater than or equal to 5nm and the ceiling is greater than or equal to 030 AGL. If LC cannot provide visual separation and the weather minimums are greater than described above, then LC will call RD to indicate NO TAV on the IDS4.

Section 5. Procedures

7-5-1. RUNWAY MEMORY AID DEVICE (RMAD)

a. Local Control must activate the RMAD when a runway crossing has been approved and deactivate the runway crossing RMAD when the runway crossing is complete.

b. Local Control must activate the RMAD when personnel and equipment are operating on the runway and deactivate the runway when the runway is clear.

7-5-2. RUNWAY 4/22 EXITING

a. Aircraft exiting Runway 4/22 southwest of Taxiway G must enter the parallel Taxiway to clear the hold lines. During a Runway 22 Operation, Ground Control must give way to all aircraft exiting at these locations.

b. During a Runway 4 Operation, Local Control must verbally coordinate with Ground Control prior to exiting the runway at or southwest of Taxiway G.

7-5-3. RED ZONE AIRCRAFT

Local control must have and maintain communications with Taxiway A restricted aircraft while on the designed portion of Taxiway A.

7-5-4. RUNWAY 9/27 OPERATIONS

a. After coordination with Ground Control, Local Control has control of Taxiway A from the Runway 27 approach hold line to the approach end of Runway 22 when Runway 27 is active with an arrival or when Runway 9 is active with a departure.

b. Local Control must APREQ use of the Runway 27 Approach Area by verbally coordinating with Ground Control when an arrival is approved for Runway 27. Pass the "RWY 27 APPCH HOT" memory aid device to GC when the Runway 27 Approach Surface Area is active.

7-5-5. RUNWAY 27 APPROACH AREA

The following is a list of possible conditions affecting the Runway 27 Approach Area:

a. Aircraft may not operate in the Runway 27 Approach Area with an aircraft landing Runway 27.

b. Aircraft may not operate in the Runway 27 Approach Area with an aircraft departing Runway 9.

c. Vehicles may operate in the Runway 9 or Runway 27 Approach Area with an aircraft operating on Runway 9/27 during VFR conditions only.

7-5-6. UNPLANNED MISSED APPROACHES AND GO-AROUNDS

Take the following actions to ensure separation and safety during an unplanned missed approach or a go-around.

a. First priority should be given to issuing control instructions that provide separation. Following this action, issue control instructions consistent with the ARP.

b. Verbal coordination must be accomplished with the appropriate radar sector(s).

c. If traffic and weather conditions permit, missed approaches and go-arounds may remain in the traffic pattern after coordination has been completed. Appropriate IFR separation must be provided until the aircraft lands or the pilot cancels their IFR flight plan. The pilot is expected to maintain terrain and obstruction clearance. Visual separation may be applied.

7-5-7. RUNWAY 4 AND RUNWAY 9 CONVERGING/INTERSECTING

Runway 4 and Runway 9 are considered intersecting runways. Apply intersecting runway separation procedures to aircraft operating on Runway 4 and Runway 9.

When two aircraft are full-stop arrivals to Runway 4 and Runway 9, they are considered converging runways.

REFERENCE-

FAA Order 7110.65, Para 3-9-9. Nonintersecting Converging Runway Operations

FAA Order 7110.65, Para 3-9-8. Intersecting Runway/Intersecting Flight Path Operations

FAA Order 7110.65, Para 7-4-4. Approaches to Multiple Runways

7-5-8. INDICATION OF LANDING CLEARANCE

When a clearance for full stop landing, touch-and-go, stop-and-go, low approach, or option is issued, indicate the condition by one of the following means:

a. Automation- Turn the data block blue, by slewing to the data block, and clicking the middle STARS button.

b. Non-automation- Write on the left side of a tablet of paper the call sign, placing a check mark next to the call sign after acknowledgment of clearance.

7-5-9. RUNWAY CLOSED MEMORY AID

Display the "Runway Closed" Memory Aid for the appropriate runway whenever a runway has been closed. Remove the "Runway Closed" memory aid once the runway has re-opened.

NOTE-

Closed areas can also be indicated on the Airport Lighting Panel.

7-5-10. OPPOSITE DIRECTION OPERATIONS (ODO)

Use the Opposite Direction Operations Procedures contained in Chapter 4, Section 9 of this order.

7-5-11. VOR A APPROACH

For aircraft executing a VOR A Approach, specify the direction of the circling maneuver in relation to the Lexington Airport, specifying pattern entry.

If the aircraft overheads the airport, verbally coordinate with affected sectors.

7-5-12. COMMUNICATION/TRANSFER OF CONTROL

a. The transfer of control point is 5 nm from the runway threshold.

b. The transfer of communications will be completed prior to 5 nm from the runway threshold, but will not exceed 15 nm.

c. Any alteration of flight paths on final that affect the approach sequence must be coordinated with RF.

d. RF will ensure that all conflicts are resolved prior to the transfer of control point.

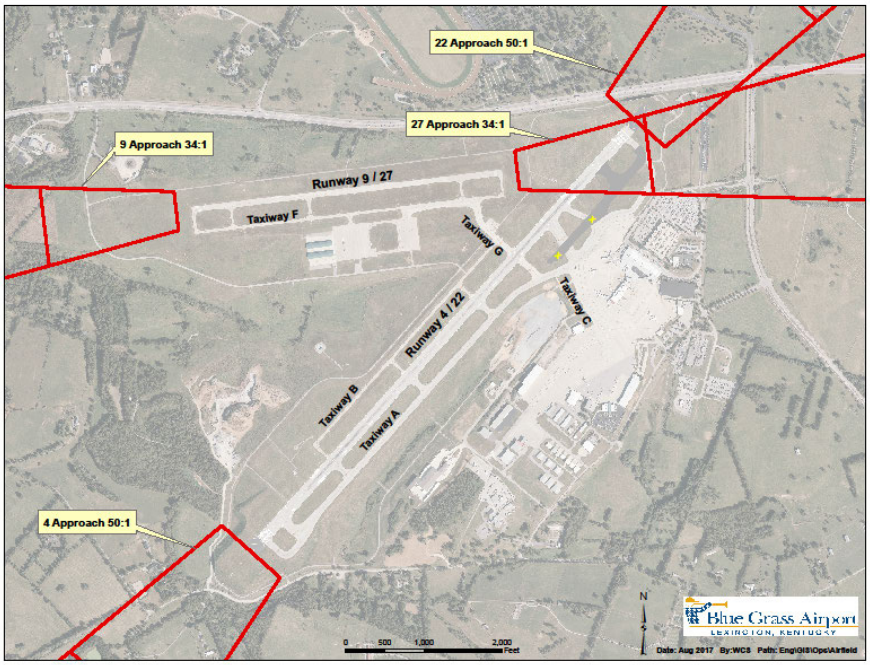
7-5-13. TRANSFER OF CONTROL TO DEPARTURE

RE and RW have control for turns in tower airspace away from the extended centerline of Runway 4/22 regardless of the departure point/runway with the following exceptions:

a. Turns shall not exceed 135 degrees from the extended centerline of Runway 4/22.

b. For aircraft assigned runway heading, a turn away from the extended centerline of Runway 4/22 in tower airspace must be in the direction of the first fix (excluding HYK) on the filed route.

Fig. 7-5-1



7-5-14. AUTOMATED RELEASE PROCEDURES (ARP)

a. Aircraft departing LEX will be auto released on the following coordinated headings.

1. Turbojets-

Tbl. 7-5-1

Runway	Altitude	Headings
4	060 or below	RH
22	060 or below	RH

2. IFR Non-Turbojet (Including Helicopters)

Tbl. 7-5-2

Runway	Altitude	Headings
4	060 or below 030	RH H360/020/070/090
9	030	RH H360/020/070/090
22	060 or below 030	RH H180/200/220/250/270
27	030	RH H180/200/220/250/270

3. VFR Non-Turbojet (Including Helicopters)

Tbl. 7-5-4

Runway	Altitude	Headings/On Course
4	At or below 030	H360 clockwise H090
9	At or below 030	H360 clockwise H090
22	At or below 030	H180 clockwise H270
27	At or below 030	H180 clockwise H270

NOTE-

On course headings are approved for VFR aircraft when their headings comply with the above.

b. Discontinue the use of ARP's when:

1. The LEX ASR-11 is OTS.

2. EFSTS is out of service.

3. TDW is out of service and visual separation cannot be provided.

4. MULTI Mode is in use.

5. Opposite Direction Operation is being conducted.

NOTE-

Ensure that when automatic releases are suspended, that flight progress strips of taxiing departures are forwarded to the TRACON prior to requesting release.

7-5-15. VFR HELICOPTER OPERATIONS

a. Departures

1. LC may clear VFR helicopter on course provided the following conditions are met:

2. Initial separation is provided with all known or observed traffic.

3. The strip is forwarded to the departure controller prior to takeoff.

4. Assigned headings differ by at least 45 degrees from the reciprocal of the final approach course.

5. VFR helicopter with pre-assigned beacon codes do not need an accompanying NAS FPS and do not need an accompanying NAS FPS and do not need to be verbally coordinated with radar provided.

(a.) 1. And 3. above are followed and

(b.) The target is tagged with a STARS full data block and the on course heading is entered into the first scratchpad using the following format: If the aircraft is on course (Hxx), if the aircraft is not on course (Rxx). The data block must then be flashed to the appropriate radar sector.

NOTE-

This data block transfer is not a radar handoff but is a non-verbal rolling call.

(c.) Any other deviation from the above procedure must be verbally approved by the appropriate radar sector.

b. Arrivals

1. Verify landing site.

7-5-16. EFSTS OPERATION

Prior to scanning the flight progress strip when an aircraft begins takeoff roll, ensure the following information is input into the EFSTS.

a. Heading other than Runway Heading:

1. Left menu preprogrammed headings- There are five standard headings preprogrammed into the scanner that can be selected. When selected they will print in the TRACON on the flight progress strip box 8. They are H360, H090, H180, H270, and OC.

2. Right menu manual headings- Any other ARP heading can be printed into box 8 of the flight progress strip by pressing 3 digits from the right menu keypad prior to scanning the strip. The heading must end in a 0 or a 5.

b. Altitude:

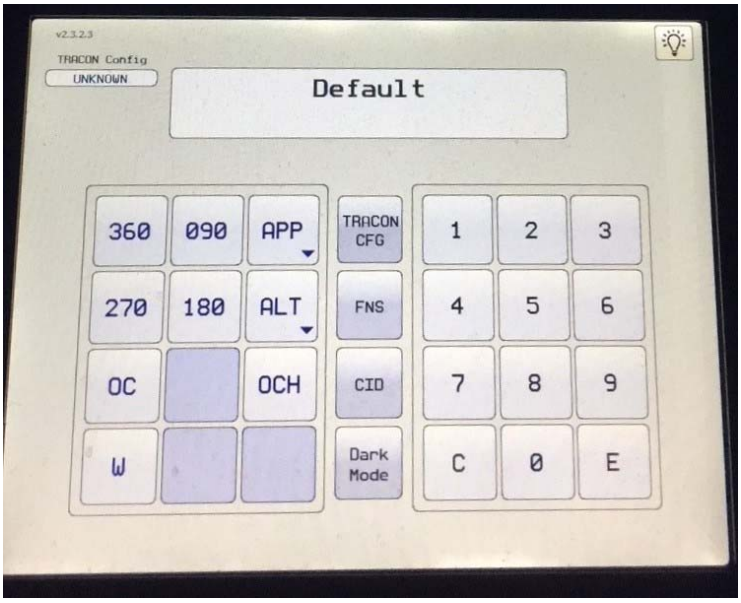
Altitude information for Runway 4/22 Departures assigned runway heading and stopped at an interim altitude must be scanned onto the departure flight progress strip. Press ALT then select from 30, 40, or 50 from sub-menu. A30, A40, or A50 will output to Box 8 respectively.

c. Requested On-Course Heading:

1. Aircraft that have HYK as the destination airport and are departing the local area must have the requested on course heading scanned onto the flight progress strip. Press OCH then select digit heading (heading in 0 or 5). Data will output to Box 17 of the TRACON flight progress strip.

2. VFR aircraft released on course must have OC from the left menu and the requested on-course scanned onto the departure flight progress strip. Data will output to Box 8 and 17.

Fig. 7-5-2



7-5-17. EFSTS LC ENTRIES

a. Aircraft that have HYK as the destination airport with a specific request in the local area should have the appropriate information scanned on to the departure strip. Press APP then one of the choices listed below in the sub-menu. Data will output to Box 18 of the flight progress strip.

Tbl. 7-5-5

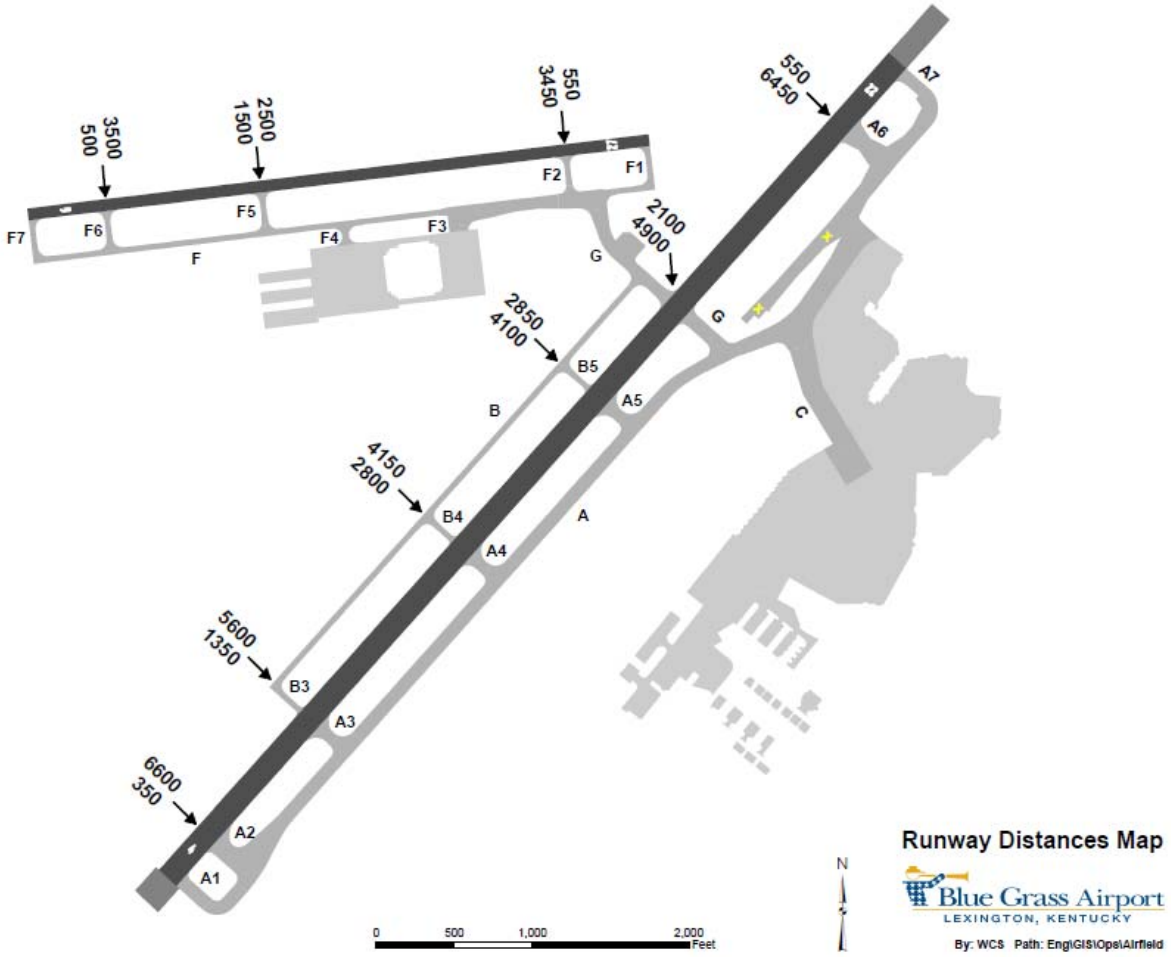
Pilot Request	Sub-menu Key
North Practice Area	NPA
South Practice Area	SPA
West Practice Area	WPA
City of Lexington	CTY
City of Versailles	VER
Photo Work	FOT
VFR Practice Approach	PLA
First Approach ILS	ILS
First Approach RNAV	RNV
First Approach VOR-A	VOR

b. Radar West Printer Redirect- When TRACON is configured in an East/West Split Configuration, flight progress strips for aircraft entering Radar West airspace must be redirected to the RW printer. Press W from left menu at any time prior to scanning the flight progress strip to redirect the next strip to RW. Subsequent scanned strips will revrdert to the RE printer automatically.

7-5-18. MEASURED RUNWAY DISTANCES

The following figure depicts distance remaining from select intersections.

Fig. 7-5-3



7-5-19. RUNWAY 9/27 LIGHTING

a. When Runway 9/27 is not in use, the Medium Intensity Runway Lights (MIRL) should remain OFF.

b. When Runway 9/27 is in use and the Medium Intensity Runway Lights (MIRL) are on, Runway 4/22 High Intensity Runway Lights (HIRL) should be set one step higher than Runway 27 Medium Intensity Runway Lights.

7-5-20. VERBAL COORDINATION

a. Verbal coordination is required with GC for the following operations:

1. Runway Crossing
2. Arrival or Departure of Helicopters to/from the ramp areas or taxiways.
3. Use of the Runway 27 Approach Surface Area when Runway 27 is active with arrivals or Runway 9 is active with departures. Manually pass the "RWY 27 APPCH HOT" Memory Aid Device to Ground Control. Retrieve the "RWY 27 APPCH HOT" Memory Aid Device when the Runway 9/27 Approach Surface Area is no longer active.

b. Verbal coordination is required with RE/RW for the following operations:

1. Departure outside of ARP's.
2. Turbojet departure off Runway 9/27.
3. Departure off Runway 27 when Runway 4 is active.
4. Departure off Runway 9 when Runway 22 is active.
5. An aircraft executing an unplanned missed approach or a go-around.
6. SVFR departures and SVFR traffic pattern operations. Tower must not release SVFR departures unless approved separation exists.

   NOTE-

   SVFR Separation can be found in FAAO 7110.65, Chapter 6, Chapter 7 para 7-5-3 or para 7-5-4.

7. For a departure that does not auto-acquire within 3-5 miles.
8. For a departure that is negative transponder.
9. For an aircraft requesting an opposite direction departure. (ODO Procedures are contained in Chapter 4, Section 6)
10. Prior to altering of the flight path of a radar sequenced arrival if it would conflict with a subsequent coordinated arrival.
11. For a VOR A Approach that overheads the airport.
12. To transfer visual separation from the Tower to Radar.

c. Coordination is considered to have been affected, if the following conditions apply.

1. VFR Hand-off to LC

(a) Approach control must provide LC with a discernable gap for fixed wing aircraft in the arrival sequence.

(b) Fixed wing aircraft must have the field in sight and be instructed to enter the downwind leg.

(c) Transfer of control must take place simultaneously with transfer of communication.

(d) LC must not impact the approach sequence without prior coordination.

(e) Aircraft with inoperative Mode-C must be verbally coordinated.

2. Point Out to LC

(a) STARS data blocks may be used for the purpose of coordinating separation between aircraft when making point-outs or issuing traffic restrictions. The transferring controller must ensure that the aircraft is level at it's assigned altitude at the time of the automated coordination or enter the assigned altitude in the 3rd scratch pad of the data block. The transferring controller must indicate a heading or the next fix in the 1st or 2nd scratch pad of the data block.

(b) Arrival controllers may use an aircraft's data block for the purpose of coordinating an IFR aircraft's flight path through the ARP headings and direct to the airport. "DLO" must be entered into the left scratch pad and an automated point out completed.

(c) Utilize the Point Out Memory Aid when necessary.

7-5-21. STARS Y1 SCRATCHPADS

STARS Y1 and H scratchpads will be utilized for coordination purposes for departure, arrival, and practice approach traffic. These scratchpads can be found in Chapter 4, Section 11 and 12.

7-5-22. FUNCTIONAL USE OF TDW

a. To determine an aircraft's identification, exact location, or spatial relationship to other aircraft.

b. To provide aircraft with radar traffic advisories

c. To provide a direction or suggested heading to VFR aircraft as a method for radar identification or as an advisory to air navigation.

d. To provide information and instructions to aircraft operating within the airport traffic area.

Section 6. Potential Problem Areas

7-6-1. MISTAKING RUNWAY 27 AND RUNWAY 22

a. During left traffic patterns for Runway 22, aircraft can mistake Runway 27 for Runway 22, especially at night (visual approaches or when traffic is in the pattern).

7-6-2. DLO AUTOMATED POINT OUTS

After accepting a point-out with DLO in the Y1 area, ensure that departure headings/altitudes do not conflict with that aircraft.

7-6-3. TOWER VISIBILITY

a. Aircraft and vehicles are not always readily visible near the approach end of RWY 4 and RWY 9.

b. TWY A1 and TWY A2 are not clearly distinguishable.

7-6-4. RMAD USE

Controllers may incorrectly use the RMAD to indicate WIP or runway activity. This measure is specifically in place to prevent a runway incursion from occurring.

7-6-5. LACK OF COORDINATION

a. Controllers may forget to coordinate SVFR operations with RE/RW/RF, resulting in a loss of standard separation.

b. Red zone procedures may not be coordinated appropriately between the Tower and the TRACON leading to go-around or unsafe situation.

7-6-6. RUNWAY 27 APPROACH AREA

Late APREQs can result in the RWY 27 Approach Area not being protecting, both for an arrival to RWY 27 or a departure from RWY 9.

7-6-7. PROHIBITED OPERATIONS

Air carriers operations are prohibited on Runway 9/27. Air carrier operations are also prohibited on Taxiway B and Taxiway F west of Taxiway F3.

REFERENCE-

Current Chart Supplement

7-6-8. TAXIWAY A7

Taxiway A7 is closed to aircraft with a wingspan of more than 150ft.

REFERENCE-

Current Chart Supplement

Chapter 8. Cab Supervisor (SC)

Section 1. Area of Jurisdiction

8-1-1. CAB SUPERVISOR

Cab Supervisor does not control movement areas or airspace.

Section 2. Position Information

8-2-1. EQUIPMENT LIST

Cab Supervisor does not have any position specific equipment.

Section 3. Frequencies

8-3-1. CAB SUPERVISOR

Cab Supervisor does not have any delegated frequencies.

Section 4. Duties and Responsibilities

8-4-1. RESPONSIBILITIES

a. Provide supervision for all cab positions

b. Eliminate distractions in the operational area in accordance with LEX 7210.3.

c. Direct the overall tower operation to ensure an equitable flow of traffic.

d. Coordinate with TRACON OS/CIC to determine active runway(s), approach in use, and flow intervals.

e. Notify the TRACON OS/CIC of an opposite direction request.

f. Utilize the Tower Runway Change Checklist when changing active runway(s).

g. Complete the Runway Opening/Closing Checklist when opening or closing a runway.

h. Ensure the TRACON OS/CIC is informed of any flow restrictions, holding, and/or emergency situations.

i. Serve as the focal point for close coordination whenever an emergency is in progress.

j. Ensure the ATIS is reviewed for accuracy and message quality prior to broadcast.

NOTE-

When runway construction is underway, ensure the review is made by a person other than the specialist who prepared the original recording.

k. Ensure 121.5 and 243.0 are monitored at the Clearance Delivery Position or where it is combined.

l. Test MSAW aural alarm (Multi Func, Z, A) located at the TDW at the beginning of each watch.

m. Ensure the ASOS OID is signed on by personnel at the beginning of each watch.

n. Combine/decombine positions, exercising good judgement by considering traffic, weather, and special operations.

o. Advise the TRACON OS/CIC when the LLWAS indicates a wind shear or reports of wind shear are received.

p. Ensure PIREP information is solicited.

1. Ensure PIREP information is disseminated to all tower positions and the TRACON OS/CIC.

2. Ensure pertinent PIREPS are broadcast to concerned aircraft in a timely manner.

q. Ensure the tower cell phone and crash phone test are conducted daily prior to 0830 local.

r. Ensure the tower flight progress strips are bundled, dated, and forwarded to the TRACON prior to the beginning of the next day shift.

Section 5. Procedures

8-5-1. CRASH PHONE

Notify the following during any alert event:

a. Public Safety via emergency call procedures (crash phone). After removing the emergency crash phone from its cradle, transmit the following information.

1. Type of Alert (Alert I, II, III, IV)

2. Location (Runway in Use, Aircraft Position, Etc.)

3. Nature of Emergency

4. Type of Aircraft

b. OS or CIC on duty.

8-5-2. RUNWAY USE

a. OSs/CICs must be the focal point when changing the direction of operation

b. OSs/CICs must consider variables such as noise, availability of NAVAIDs, equipment, runway conditions, construction, weather, winds, presence of birds and many other factors in making runway use determination.

Section 6. Potential Problem Areas

8-6-1. DISTRACTIONS

As a part of the tower team, SC is responsible for eliminating distractions in the operational areas.

Chapter 9. Cab Coordinator (CC)

Section 1. Area of Jurisdiction

9-1-1. CAB COORDINATOR

Cab Coordinator does not control movement areas or airspace.

Section 2. Position Information

9-2-1. EQUIPMENT LIST

Cab Coordinator does not have any position specific equipment.

Section 3. Frequencies

9-3-1. CAB COORDINATOR

Coordinator Tower does not have any delegated frequencies.

Section 4. Duties and Responsibilities

9-4-1. RESPONSIBILITES

a. Serve as the assistant/coordinator for Local and Ground Control.

b. Operate as the "extra pair of eyes" to assist Local and Ground Controllers in scanning the movement area.

Section 5. Procedures

9-5-1. PROCEDURES

Cab coordinator currently does not have any position specific procedures. Cab coordinator assists in completing all tower related duties.

Section 6. Potential Problem Areas

9-6-1. DISTRACTIONS

As a part of the tower team, CC is responsible for eliminating distractions in the operational areas.

Chapter 10. Radar Data (RD)

Section 1. Area of Jurisdiction

10-1-1. RADAR DATA

Radar Data does not control movement areas or airspace.

Section 2. Position Information

10-2-1. EQUIPMENT LIST

a. STARS/TCW

b. IVSR

c. DASI

d. IDS

e. RVR

f. PET2000

g. FSP Printer

j. EFSTS

k. ASR-11 Control Panel

l. FDIO

m. ASOS (VDU-Video Display Unit)

Section 3. Frequencies

10-3-1. RADAR DATA

Radar Data does not have any delegated frequencies.

Section 4. Duties and Responsibilities

10-4-1. DUTIES

a. Remove and prepare strips from the FSP and distribute them to the appropriate positions. Replace FSP forms on all TRACON printers as necessary.

b. Forward FDC NOTAMs, CWA, SIGMETs, and AIRMETs to the SI.

c. Advise Radar controllers of current ATIS code and type of approach advertised when received from CD.

d. Collect flight progress strips from radar positions. Bundle strips and record date and time period on each bundle.

e. Combine and de-combine positions to tower when directed. Use the following procedure:

1. Combine

(a.) Force all active and inactive strips to tower Flight Strip Printer

(b.) Notify ZID Automation to combine printer in the tower.

(c.) Release control of ASR 11 panel. Advise tower to take control of ASR 11.

2. De-combine

(a.) Notify ZID Automation to de-combine tower and TRACON printers.

(b.) Advise Tower to release control of ASR 11 panel. Take control of ASR 11 panel.

f. RD must coordinate any requests regarding special activities to the OS/CIC.

g. RD must verbally inform RE, RW, and RF when flow restrictions are in effect.

h. RD will inform all TRACON positions when NO TAV is entered into the IDS4.

Section 5. Procedures

10-5-1. EFSTS OUTAGE

During an EFSTS outage, post IFR departure strips in the appropriate positions. Revise or update IFR departure strips as necessary.

10-5-2. PIREPS

a. Ensure current PIREPS are entered on the LEX Form 7210-4 PIREP Log

b. Advise TRACON OS/CIC when an hourly PIREP is due.

c. Disseminate PIREP information to RE/RW/RF/SC

10-5-3. IDS

a. Post and update information in the IDS via the following methods:

1. When entering weather in the IDS, use the METAR format (i.e., BKN032). Entering variable values and remarks is optional
2. Enter NOTAMs designated by the OS/CIC for inclusion in the ATIS broadcast on the LEX ATIS NOTAM page.
3. Enter NOTAMs not designated for inclusion in the ATIS on the LEX NON-ATIS NOTAM or Satellite NOTAM page as appropriate.
4. Enter "VA" for visual approaches or "ILS" for ILS approach, as appropriate, in the information section of IDS page 0200 to denote the type of approach advertised on the ATIS.
5. Enter "SIMOS" in the information section of IDS page 0200 when simultaneous approaches are included in the ATIS broadcast.
6. Enter "Y or N" to indicate the status of TAV.

Section 6. Potential Problem Areas

10-6-1. IDS NOT UPDATED

The IDS system may not contain accurate information or may contain information from the previous day.

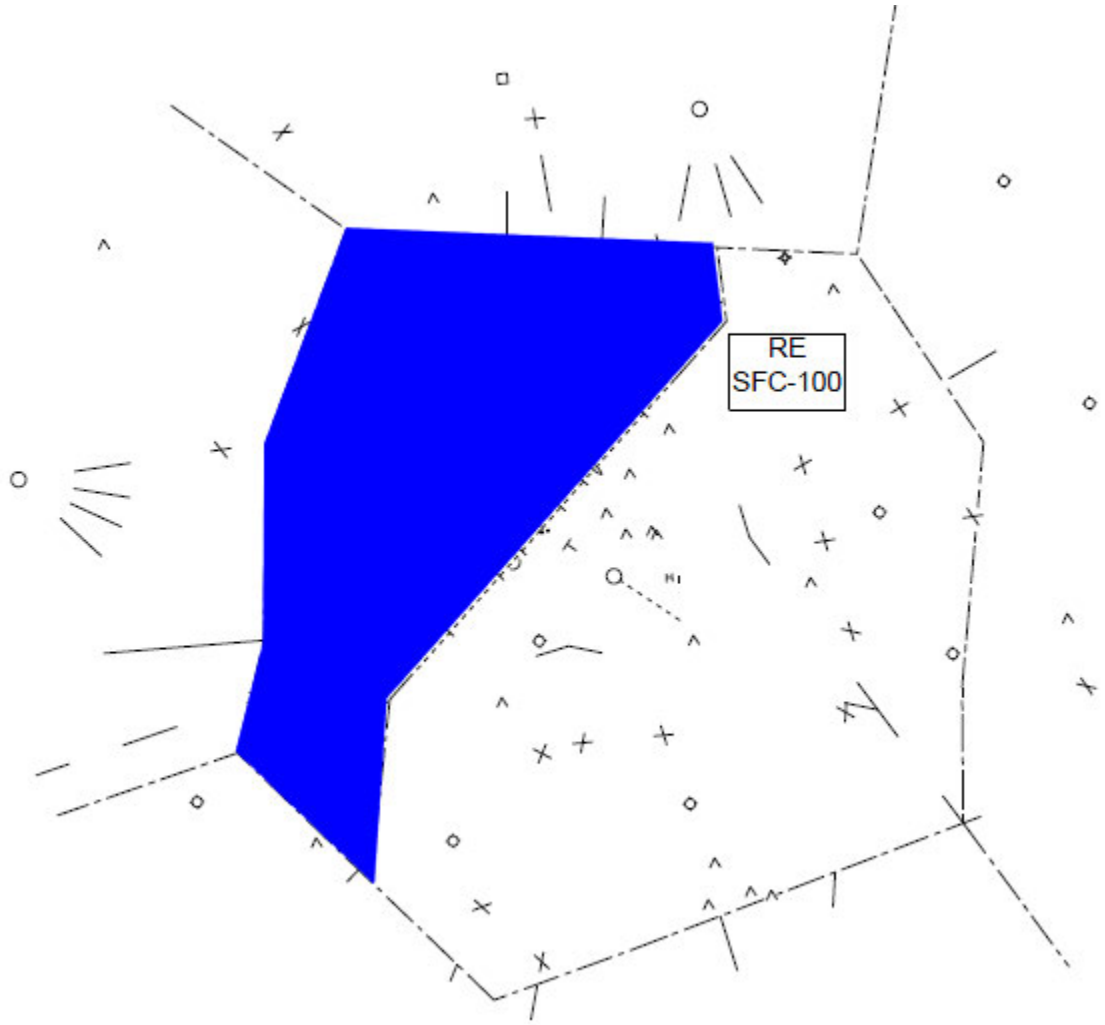
10-6-2. COORDINATION

When RD is not able to coordinate with all positions, it is necessary to provide the information to the OS/CIC for dissemination.

Chapter 11. Radar East (RE)

Section 1. Area of Jurisdiction

11-1-1. RADAR EAST



NOTE-

LC and RF Airspace are not depicted.

Section 2. Position Information

11-2-1. EQUIPMENT LIST

a. STARS/TCW

b. DASI

c. IDS

d. LLWAS-RS

e. RVR

f. ASR-11 Control Panel

g. Flight Strip Printers: FDIO and EFSTS

h. IVSR

11-2-2. BACKUP EQUIPMENT

a. Primary and Secondary Radar channels located on the ASR-11 Radar Control Panel above and adjacent to the Radar Data Position. There are two channels available for each.

b. Commercial phones and TRACON cell phone.

c. Frequencies:

1. Located above each position are the VHF/UHF main and standby transmitters and receivers. There is one for one backup capability except on the following frequencies:

(a.) 243.0

(b.) 121.5

(c.) 118.65

2. PET 2000 tunable radios located at the ADW position have all the frequencies available.

3. An additional tunable transceiver is located below the system control panel in the TRACON.

4. ECVS (Emergency Communications Voice System)

(a.) 120.15 at RE

(b.) 120.75 at RW

(c.) 133.4 at RF

Section 3. Frequencies

11-3-1. VHF FREQUENCIES

120.15

11-3-2. UHF FREQUENCIES

259.3

Section 4. Duties and Responsibilities

11-4-1. RESPONSIBILITIES

a. Determine the arrival sequence when RF is closed. Coordination for an arrival sequence should be accomplished prior to the aircraft reaching a point 10 miles from the airport.

b. Provide radar service to aircraft within assigned airspace.

c. Handwrite a flight progress strip for aircraft that execute an unplanned missed approach and return to RE.

d. Utilize opposite direction procedures located in Chapter 4, Section 6, when an opposite direction operation is being conducted.

e. When RF is open, all aircraft landing LEX operating at or above 070 will be handed off at or descending to 070.

f. Call forward IVSR as necessary when combining positions.

g. When combined in the tower cab, provide all services normally associated with TRACON operations in accordance with FAAO 7110.65 and this handbook.

h. Advise the OS/CIC if the altimeter setting displayed in the SSA is different than the DASI.

i. Advise the OS/CIC if the time setting displayed in the SSA is different than the digital position clock.

j. Enter arrival delay start and end times.

k. When issuing a VOR-A Approach clearance, instruct the aircraft to circle to the appropriate runway in use.

EXAMPLE-

"Cleared VOR-A Approach circle to Runway 4."

j. If radar contact is not established, aircraft will be instructed to report exiting Class “C” airspace.

11-4-2. VERBAL COORDINATION

RE must verbally coordinate with LC the following:

a. Opposite direction operation.

b. When the TDW is out of service, RE must call the tower with inbound aircraft information including callsign and type prior to 10 flying miles from the runway threshold.

c. Control of aircraft maintaining visual separation may be transferred between positions through verbal coordination.

11-4-3. NON-VERBAL COORDINATION

a. VFR Hand-offs to LC

1. RE may handoff via STARS, VFR aircraft that encroach upon the ARP departure headings provided the following conditions are met:

(a) RE must provide LC with a discernable gap for fixed-wing aircraft in the arrival sequence.

(b) Fixed wing aircraft must have the field in sight and be instructed to enter the downwind leg.

(c) Transfer of control must take place simultaneously with transfer of communication.

(d) LC must not impact the final without prior coordination.

(e) Aircraft with inoperative Mode-C must be verbally coordinated.

b. IFR Point-outs to LC

STARS data blocks may be used for the purpose of coordinating separation between aircraft when making point-outs or issuing traffic restrictions. The transferring controller must ensure that the aircraft is level at it's assigned altitude at the time of the automated coordination or enter the assigned altitude in the 3rd scratch pad of the data block. The transferring controller must indicate a heading or the next fix in the 1st or 2nd scratch pad of the data block.

c. RE must enter the following scratch pad data in accordance with Chapter 4, Section 12.

d. For local VFR departures, "Multi JL Slew" must be entered to change status to arrival.

e. Practice instrument approach scratch pads will be according to Chapter 4, Section 11 and Section 12.

f. PIREP Information. Solicit PIREP information IAW 7110.65 para 2-6-2.

1. Forward PIREP information received from pilots to SI and RD positions.

2. Broadcast pertinent PIREP information to concerned aircraft in a timely manner.

Section 5. Procedures

11-5-1. VERTICAL SEPARATION ON ARRIVALS

When sequencing arrivals, vertical separation must be maintained between all aircraft receiving IFR services on opposing base legs, parallel base legs or turning inside straight-in traffic. Controllers must ensure that aircraft are at altitudes that ensure vertical separation until both aircraft are established on the final approach course or the appropriate standard separation is applied.

Section 6. Potential Problem Areas

11-6-1. FINAL AIRSPACE

a. Incorrect altitude assignment for aircraft handed off to RF.

b. Late handoff to RF.

c. Not ensuring conflictions are resolved prior to communication transfer to RF.

d. Improper sequence coordination with RW.

e. Entering LC airspace without coordination.

f. Departures off 27K have the potential to conflict with Runway 22 arrival traffic.

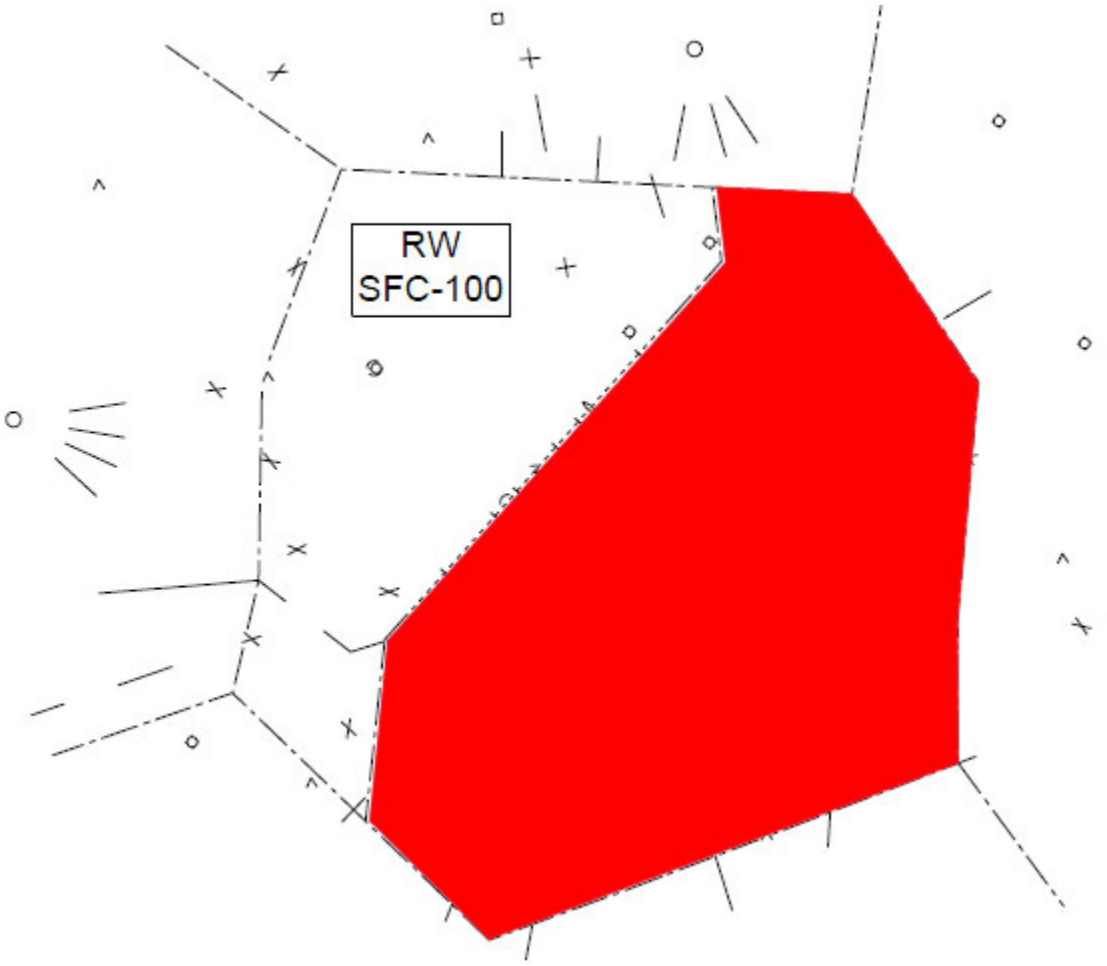
11-6-2. AUTOMATION ERRORS

Incorrect scratchpad entries can affect traffic count, LC planning, and adjacent controllers.

Chapter 12. Radar West (RW)

Section 1. Area of Jurisdiction

12-1-1. RADAR WEST



NOTE-

LC and RF Airspace are not depicted.

Section 2. Position Information

12-2-1. EQUIPMENT LIST

a. STARS/TCW

b. DASI

c. IDS

d. LLWAS-RS

e. RVR

f. ASR-11 Control Panel

g. Flight Strip Printers: FDIO and EFSTS

h. IVSR

Section 3. Frequencies

12-3-1. VHF

a. 120.75

b. 118.65 Clearance Delivery at FFT

c. 127.425 Clearance Delivery at 27K

12-3-2. UHF

298.9

Section 4. Duties and Responsibilities

12-4-1. RESPONSIBITIES

a. Provide radar service to aircraft within assigned airspace.

b. Handwrite a flight progress strip for aircraft that execute an unplanned missed approach and return to RW.

c. Utilize opposite direction procedures located in Chapter 4, Section 6, when an opposite direction operation is being conducted.

d. Assumes the RF airspace, which lies within the RW, delegated airspace when RF is combined with RE.

e. Coordination for an arrival sequence should be accomplished prior to the aircraft reaching a point 10 miles from the airport.

f. When RF is operational, all aircraft landing LEX operating above 070 will be handed-off to RF descending to or level at 070.

g. Enter arrival delay start and end times.

h. Call forward IVSR as necessary when combining positions.

j. If radar contact is not established, aircraft will be instructed to report exiting Class “C” airspace.

12-4-2. VERBAL COORDINATION

RW must verbally coordinate with LC the following:

a. Opposite direction operation.

b. When the TDW is out of service, RW must call the tower with inbound aircraft information including callsign and type prior to 10 flying miles from the runway threshold.

c. Control of aircraft maintaining visual separation may be transferred between positions through verbal coordination.

12-4-3. NON-VERBAL COORDINATION

a. VFR Hand-offs to LC

1. RW may handoff via STARS, VFR aircraft that encroach upon the ARP departure headings provided the following conditions are met:

   (a) RW must provide LC with a discernable gap for fixed-wing aircraft in the arrival sequence.

   (b) Fixed wing aircraft must have the field in sight and be instructed to enter the downwind leg.

   (c) Transfer of control must take place simultaneously with transfer of communication.

   (d) LC must not impact the final without prior coordination.

   (e) Aircraft with inoperative Mode-C must be verbally coordinated.

b. IFR Point-outs to LC

STARS data blocks may be used for the purpose of coordinating separation between aircraft when making point-outs or issuing traffic restrictions. The transferring controller must ensure that the aircraft is level at it's assigned altitude at the time of the automated coordination or enter the assigned altitude in the 3rd scratch pad of the data block. The transferring controller must indicate a heading or the next fix in the 1st or 2nd scratch pad of the data block.

c. RW must enter the following scratch pad data as appropriate:

1. Enter aircraft type abbreviations as listed in FAAO 7360.1 in the right side scratch pad for LEX arrivals.

2. Enter the airport identifier in scratch pad 1 for VFR aircraft landing at a satellite airport. Adapted local heliport identifiers are listed in Table 7-5-6.

3. VA for visual approach when not advertised.

4. SFR for SVFR aircraft.

5. PLA for satellite practice approaches.

6. LEX practice approach data as described in Chapter 4, Section 11 and 12.

7. R27 for aircraft assigned Runway 27.

8. R9 for aircraft assigned Runway 9.

9. RED for arriving red zone aircraft.

10. RJC for aircraft landing Lucas Field (79KY).

11. TAC for helicopter landing Tac Air.

12. The assigned runway for VFR helicopters assigned a runway.

13. The assigned runway for ODO arrivals.

d. For local VFR departures, "Multi JL Slew" must be entered to change status to arrival.

e. STARS Y1 and H scratchpads will be utilized for coordination purposes for departure, arrival, and practice approach traffic. These scratchpads can be found in Chapter 4, Section 11 and 12.

f. PIREP Information. Solicit PIREP information IAW 7110.65 para 2-6-2.

1. Forward PIREP information received from pilots to SI and RD positions.

2. Broadcast pertinent PIREP information to concerned aircraft in a timely manner.

Section 5. Procedures

12-5-1. VERTICAL SEPARATION ON ARRIVALS

When sequencing arrivals, vertical separation must be maintained between all aircraft receiving IFR services on opposing base legs, parallel base legs or turning inside straight-in traffic. Controllers must ensure that aircraft are at altitudes that ensure vertical separation until both aircraft are established on the final approach course or the appropriate standard separation is applied.

Section 6. Potential Problem Areas

12-6-1. SDF ARRIVALS

a. Incorrect speed assignment to SDF arrivals.

b. Handoff may not automate to the correct sector.

12-6-2. COORDINATION

a. Coordination may be late or ineffective with RE for arrival sequence.

b. Incorrect scratchpad entries.

12-6-3. FINAL

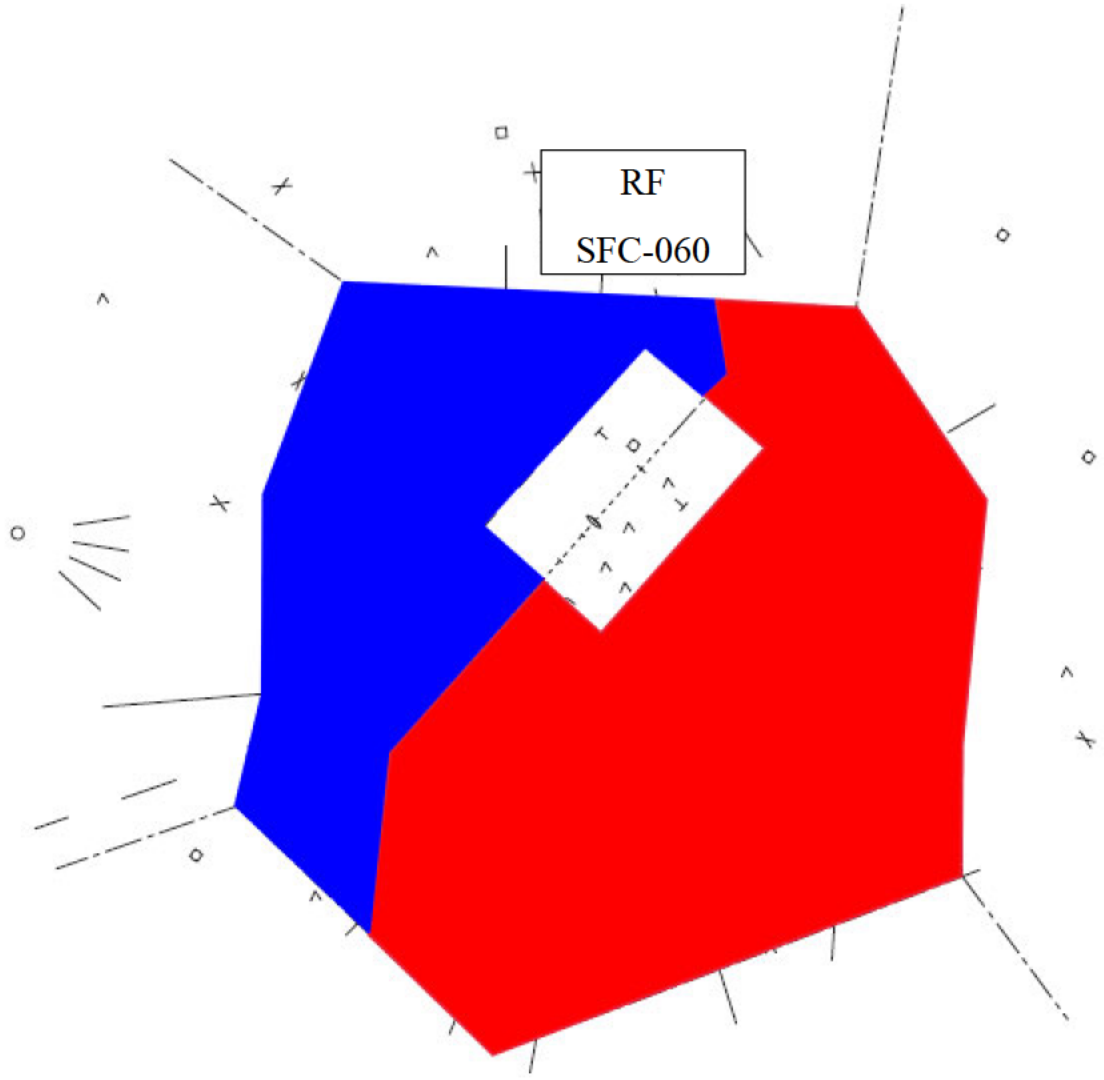
a. Departures off 27K may conflict with Runway 22 arrivals when LEX is on a Southwest Operation.

b. Incorrect altitude assignment to RF. Not ensuring conflicts are resolved prior to communication transfer to RF. Late handoffs to RF.

Chapter 13. Radar Final (RF)

Section 1. Area of Jurisdiction

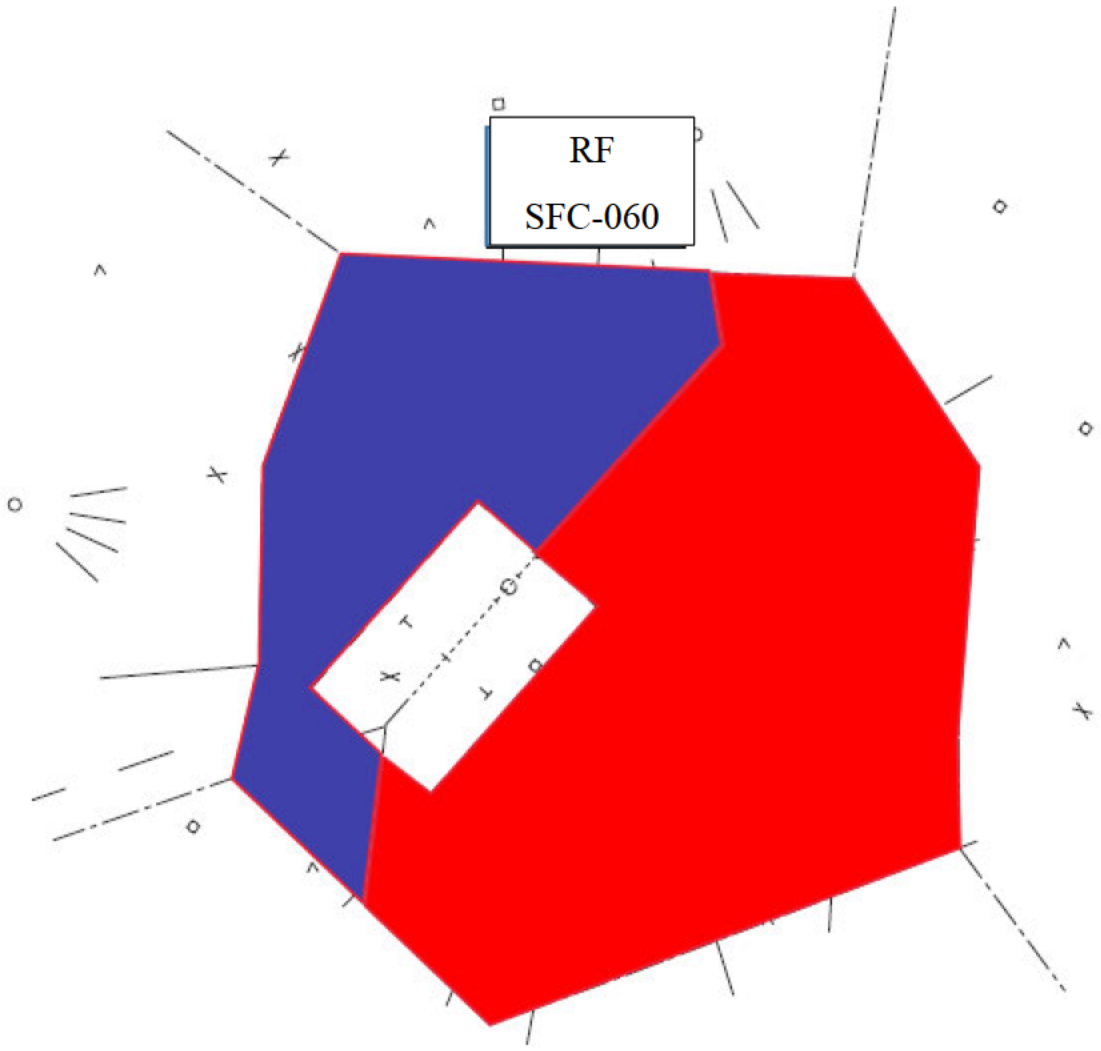
13-1-1 SOUTHWEST OPERATION



NOTE-

LC Airspace is not depicted.

13-1-2 NORTHEAST OPERATION



NOTE-

LC Airspace is not depicted.

Section 2. Position Information

13-2-1. EQUIPMENT LIST

a. STARS/TCW

b. DASI

c. IDS

d. LLWAS-RS

e. RVR

f. ASR-11 Control Panel

g. Flight Strip Printers: FDIO and EFSTS

h. IVSR

Section 3. Frequencies

13-3-1. VHF

a. 133.4

b. 127.425 Clearance Delivery at 27K

c. Monitor 121.5

13-3-2. UHF

Monitor 243.0

Section 4. Duties and Responsibilities

13-4-1. RESPONSIBILITIES

a. Vector arrivals to the appropriate final approach course.

b. Provide Class "C" service in assigned airspace.

c. RF has control on contact for descent and turns for all aircraft handed-off to that sector.

d. Utilize opposite direction procedures located in Chapter 4, Section 6, when an opposite direction operation is being conducted.

Section 5. Procedures

13-5-1. COMMUNICATION/TRANSFER OF CONTROL

a. The transfer of control point is 5 nm from the runway threshold.

b. The transfer of communications will be completed prior to 5 nm from the runway threshold, but will not exceed 15 nm.

c. Any alteration of flight paths on final that affect the approach sequence must be coordinated with RF.

d. RF will ensure that all conflicts are resolved prior to the transfer of control point.

13-5-2. CONTROL FOR TURNS

Radar final has control on contact for turns and descent for all aircraft.

Section 6. Potential Problem Areas

13-6-1. SEQUENCING

a. Speed Control.

b. 27K departures and arrivals can affect LEX departure and arrival traffic.

c. Entering protected airspace belonging to another controller without coordination i.e. downwind may impact ARPs used by Tower.

d. Incorrect scratchpad entry can lead to aircraft receiving incorrect clearance.

Chapter 14. TRACON Supervisor (SI)

Section 1. Area of Jurisdiction

14-1-1. TRACON SUPERVISOR

TRACON Supervisor does not control movement areas or airspace.

Section 2. Position Information

14-2-1. EQUIPMENT LIST

a. STARS/TCW

b. IVSR

c. DASI

d. IDS

e. RVR

f. RMADS

g. SAWS

h. PET2000

i. FPS Printer

j. TRACON Cell Phone

Section 3. Frequencies

14-3-1. TRACON SUPERVISOR

TRACON Supervisor does not have any delegated frequencies.

Section 4. Duties and Responsibilities

14-4-1. RESPONSIBILITES

a. Provide general supervision by actively engaging in air traffic operations

b. Eliminate distractions in the operational area as outlined in LEX 7210.3.

c. Advise the Tower OS/CIC of an ODO request.

d. Direct the overall operation in the TRACON to ensure an equitable flow of traffic.

e. Establish the type of approach in use and inform the Tower OS/CIC.

f. Coordinate the activities of all the affected position when changing the direction of operation utilizing the TRACON Runway Change Checklist.

g. Coordinate all operations concerning red zone aircraft and other aircraft they affect.

h. Ensure PIREP information is solicited and disseminate IAW JO 7110.65.

i. Review CWAs, SIGMETs, AIRMETs, and other weather data to determine if it affects the Lexington area or traffic in the area. Ensure that relevant weather products are disseminated on frequency by affected sectors.

j. Complete the OS/CIC and Watch Duties Checklists.

k. Ensure that 121.5 and 243.0 are monitored at least at one operational position in the TRACON.

l. Utilize the Planned Equipment Outage Checklist, prior to the releasing of equipment to Tech Ops. Personnel.

m. Utilize the Planned Equipment Outage Checklist, prior to BGA conducting mowing operations.

n. Combine and de-combine positions based on known/projected traffic conditions.

o. Ensure SIA/IDS-4 is accurate and complete.

p. Enter delays into OPSNET.

q. Notify AOCC when the AT engine generator (EG) is on or the (EG) UPS is in alarm.

r. Determines the radar sensor mode. Decides when to transition from FUSION, single sensor, or MULTI sensor mode.

NOTE-

Fusion is the preferred radar sensor mode followed by single sensor LEX.

s. Must not release LEX ASR-11 when QRI is out of service.

t. Make an entry on the 7230-4 Facility Log stating “Multi-Sensor Mode in Use” and the reason.

u. When on any combination or only QRI, MULTI, or SDF radar feeds:

1. Notify Tech Ops.

2. Ensure a NOTAM is issued if service is degraded.

3. If necessary, broadcast on the ATIS:

"Primary radar out of service. VFR services are available to aircraft with transponders and are limited to safety alerts, traffic advisories, and sequencing to Lexington Airport."

v. Ensure all operational personnel are verbally briefed for FLC and VIP aircraft. SI must log these briefings on the LEX Daily Operations Log.

Section 5. Procedures

14-5-1. DAILY OPERATIONS LOG (FAA FORM 7230-4)

q. Print out and certify the Daily Operations Log (FAA Form 7230-4) for the previous day if on the midnight shift.

u. Attach the NOTAM log(s), PIREP log, TAF, and Daily Spreadsheet to the 7230-4 log. Forward paperwork and previous day's flight progress strips to the Administrative Office.

14-5-2. WEEKLY EQUIPMENT CHECKS

a. On the first Wedsnesday of each month:

1. Check SAWS and DASI altimeter against ASOS (must be within .02)

2. In accordance with the local Air Traffic/Tech Ops. LOA, advise Tech Ops. When an altimeter correction is needed. An altimeter correction factor must be posted on the weather page of the IDS until a discrepancy can be corrected by Tech Ops. personnel. The local abbreviation "ACF" must be used followed by the correction factor; for example, "ACF +.01" or "ACF-.01."

b. Print a Terminal Area Forecast (TAF) daily. The TAF may be obtained from the NOAA website at http://aviationweather.gov/adds/tafs; use KLEX in the search area.

14-5-3 NOTAMS

Ensure timely receipt, posting, and currency of NOTAM information via the following:

1. Logging onto FAA Pilot Web at https//pilotweb.nas.faa.gov/pilotweb/ and printing current NOTAMs using at least a 40nm radius search of LEX. Ensure the website was updated within the last hour by checking the date and time in the upper right corner.

2.. Designating NOTAMs to be included in the ATIS broadcast with an "A" in the left margin and ensuring they are entered into the IDS on the "LEX ATIS NOTAMs" page.

3. Checking accuracy of NOTAMs listed in the IDS.

4. Pertinent NOTAMs received during the shift may be included on the 7230-4 or included on the printed NOTAM sheet.

(a) Forward to RD for input into the IDS.

(b) Ensure all positions of operation are informed of the content of the NOTAM.

14-5-4. RUNWAY USE

a. OSs/CICs must be the focal point when changing the direction of operation

b. OSs/CICs must consider variables such as noise, availability of NAVAIDs, equipment, runway conditions, construction, weather, winds, presence of birds and many other factors in making runway use determination.

Section 6. Potential Problem Areas

14-6-1 OPERATIONAL DISTRACTIONS

Not actively monitoring air traffic operations by becoming distracted by non-operational activities. Non-operational activities include but are not limited to:

a. Facility Tours

b. Email

c. Creating watch schedules or posting schedules in Cru-Art

d. Conducting non-operational phone calls

e. Completing 3120-25s.

f. Conducting meetings

g. Non-operational conversations

14-6-2 POSITION CONSOLIDATION

SIs must evaluate many factors in order to determine the appropriate position assignment and consolidation.

Chapter 15. Coordinator TRACON (CI)

Section 1. Area of Jurisdiction

15-1-1. COORDINATOR TRACON

Coordinator TRACON does not control movement areas or airspace.

Section 2. Position Information

15-2-1. EQUIPMENT LIST

Coordinator TRACON does not have any position specific equipment.

Section 3. Frequencies

15-3-1. COORDINATOR TRACON

Coordinator TRACON does not have any delegated frequencies.

Section 4. Duties and Responsibilities

15-4-1. RESPONSIBILITIES

a. Maintain continuous awareness of traffic flow, status of NAVAIDs, weather conditions, and traffic forecasts.

b. Perform interfacility and intrafacility coordination.

c. Assist the radar positions on any action required to accomplish overall objectives.

Section 5. Procedures

15-5-1. PROCEDURES

Coordinator TRACON currently does not have any position specific procedures. Coordinator TRACON assists in completing all TRACON related duties.

Section 6. Potential Problem Areas

15-6-1. DISTRACTIONS

As a part of the TRACON team, CI is responsible for eliminating distractions in the operational areas.

CONTROLLER GLOSSARY

Term	Definition
ADG Group I,II, III, IV, V, VI.	

	Wingspan in feet (m)	**Tail Height in feet (m)**	**Typical Aircraft**
I	< 49' (15m)	< 20' (6.1m)	CESSNA 421 Golden Eagle/PIPER PA-31
II	49' (15m) - < 79' (24m)	20' (6.1m) - < 30' (9.1m)	CRJ/SAAB 340
III	79' (24m) - < 118' (36m)	30' (9.1m) - < 45' (13.7m)	BOEING 737-700/AIRBUS A-320/EMBRAER ERJ 190-100
IV	118' (36m) - < 171' (52m)	45' (13.7m) - < 60' (18.3m)	B767/AIRBUS A-310
V	171' (52m) - < 214' (65m)	60' (18.3m) - < 66' (20.1m)	B777/B787/A330
VI	214' (65m) - <	66' (20.1m)	BOEING 747-8/A380

	262' (80m) | - < 80' (24.4m)
DSA	Direct Sensor Access utilizes a raw radar feed from a single sensor (selectable) and displays only primary and secondary radar data with no automation interface (since there is no position symbol, targets cannot be tagged). DSA is a backup only to be used when both STARS Radar Data Processors fail.
FUSED	A "smoothed" display of targets that are generated from all available sensors, both ground based, Lexington (LEX), Lynch Long Range (QRI), Louisville/Standiford (SDF), and satellite based (ADS-B). Target updates occur every second and with the aid of a computer calculated positon, provide a target which appears to be constantly moving (not "jumping"). FUSED is the normal operating setting to be used when it is available.
MULTI	Combines Radar input from 2 to 16 sites into a single picture utilizing a mosaic grid composed of radar sort boxes.
Single Sensor	In this setting, the radar sensor can be selected on an individual basis. Targets will be displayed in a "top hat" configuration (primary display3ed in blue and the associated secondary beacon slash in green). STARS will still be receiving data from the other available sensors. LEX Radar in single sensor is preferred when FUSED is not available.

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APPENDIX A. Additional STARS Information

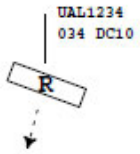
Tbl A-1. Examples of Target and Position Symbols

Selected Radar Mode	Track owner-ship	Associated Track	Unassociated Track	Tentative (non-established) Track (see Note 6)	Interfacility Pseudo Track
Multi-Sensor mode or Single Sensor mode in Ground Range view	Local	UAL1234 034 DC10 R	2453 150 25 ✻		(Not applicable)
	Center	UAL1234 034 DC10 C	(Not applicable)		UAL1234 NAT DC10 C
Slant Range view (with target extent symbols)	Local	UAL1234 034 DC10 R	2453 150 25 ✻		(Not applicable)
Slant Range view (w/o target extent symbols)	Center	UAL1234 034 DC10 C	(Not applicable)	(Not applicable)	UAL1234 NAT DC10 C
MLAT Sensor Slant Range view	Local	UAL1234 034 DC10 ● R	050 ● ✻	●	(Not applicable)
Fused mode (see Note 8)	Local	UAL1234 034 DC10 ● R	050 ● ✻	✻ □ + Δ OR V	(Not applicable)
FMA Mode (see Note 7)	Local	UAL1234 034 DC10 ○	050 ○	○	(Not applicable)

Tbl A-2. Examples of Target and Position Symbols

Notes

1. Interfacility tracks do not include a target symbol. The position symbol ("C" for example) is located where the target symbol would be.
2. Target symbols in Ground Range views that are more than an adaptable distance (nominally 40 nm) from the reporting radar are shown using unfilled rectangles (outlines only) as shown at right. Target symbols for fast update sensors are always filled.
3. History symbols are not shown for pseudo tracks, ghost tracks, tentative tracks, and tracks outside the altitude filter limits that do not have a data block.
4. In Multi–sensor and Single Sensor Ground Range views, the rectangle extent symbols are oriented normal to the direction of flight. In Slant Range view, the target extent symbols are oriented normal to the reporting sensor.
5. In Slant Range view (with target extent symbols) the position symbol is offset from the target center location by an adapted fraction of a nautical mile in the direction away from the reporting sensor.
6. For all modes except Fused, tentative beacon–only or beacon–reinforced tracks do not display position symbols, only target symbols.
7. FMA symbols are shown as they would appear with position symbols disabled. The track's location is in the center of the circle.
8. In Fused mode, the size of the target symbol is based on the selected display range, the adapted target symbols sizes for normal and reduced (if PAM mode is selected) ADS–B and Non ADS–B tracks, and the adapted minimum pixel size.
9. In DSF or DSA mode, targets are not displayed with position symbols, only target symbols are displayed.



(See Note 2)

Tbl A-3. Position Symbols for Unassociated Targets

Target Category	Target Description		Symbol
	Position Symbols		
Adapted Beacon Code Track	Track that is squawking a beacon code that has an adapted position symbol. This symbol supercedes the symbol of the Target Categories identified below.		Adapted alphanumeric character or =, #, $, %, &, ?
Mode–C Track	Not beacon code selected	Beacon or reinforced track that has valid Mode–C data and is not selected by beacon code. (Includes Position Adjustable Range Reference Orientation Transponders (PARROTs) and beacon Real Time Quality Control (RTQC) targets).	✻
	Beacon code selected	Beacon or reinforced track that has valid Mode–C data and is selected by beacon code. (includes PARROTs and beacon RTQC targets).	□
Non–Mode–C Track	Not beacon code selected	Beacon or reinforced track that does not have valid Mode–C data and is not selected by beacon code. (includes PARROTs and beacon RTQC targets).	+
	Beacon code selected	Beacon or reinforced track that does not have valid Mode–C data and is selected by beacon code. (includes PARROTs and beacon RTQC targets).	Δ
Primary tracks	Tracks being updated by primary radar only targets.		◊
Uncorrelated Search–only Plots	Search–only radar returns that cannot be correlated to a track. These symbols are shown oriented so that their sides are parallel with the display screen. Radar–correlated reports (when displayed) are also shown using this position symbol.		■

Notes

1. When not in Fused mode, Tentative beacon–only or beacon–reinforced tracks do not display position symbols until the track becomes established. When in Fused mode, tentative beacon–only or beacon–reinforced tracks display position symbols as shown in this table for Mode–C or Non–Mode–C tracks.
2. Primary tracks display position symbols (hollow diamonds) if the tracks are not coasting and display of position symbols for unassociated primary tracks is enabled. Refer to the command "Enable / inhibit track position symbols for unassociated primary tracks" *(p. 4–29)* to change this setting. An unassociated primary track that is in alert also displays the diamond position symbol.

Tbl A-4. Data Block Indicators

Indicator	Description	Recommended action
OLD	No Track Update (TU) messages received for pseudo FDB	Controller to verify aircraft position.
PR (blinks)	Resume flight progress indicator. Departure flight was suspended and disassociated while in a beacon mismatch condition, and has now become active.	Controller may need to notify the ARTCC that the flight is now active.
CX (blinks)	Handoff cancelled by receiving facility	This track needs manual coordination to perform an interfacility handoff.
OR (blinks)	Out of range indicator. Track's current range is greater than an adapted distance from the selected single sensor's location (Single sensor mode only).	Controller could switch to another sensor or enable Multi−sensor or Fused mode.
FP (blinks)	ARSA Flight plan transfer failure.	This track needs manual coordination to perform an interfacility handoff.
IF (blinks)	Unsuccessful Interfacility message transfer	This track needs manual coordination to perform an interfacility handoff.
HO (blinks)	Late handoff indicator.	Controller handoff action
DM (blinks)	Interfacility coordination indicator. To display a DM in a track, refer to *p. 5−166.*	This track needs manual coordination to perform an interfacility handoff.
HL	Hold indicator	None.
TEC	Tower Enroute Control (ARSA) flight indicator	None.

Tbl A-5. Aircraft Categories

When using Weight Classes (at RECAT−disabled sites)		When using Wake Categories (at RECAT−enabled sites)	
Identifier	**Description**	**Identifier**	**Description**
F	B757	A through F	Corresponding Wake Category as defined in adaptation
H	Heavy		
J	Jumbo		
X	High performance propeller		

Tbl A-6. Flight Rules Identifiers

Identifier	Description	Identifier	Description
V	VFR flight	blank field	IFR flight
P	VFR on Top (IFR) flight	Any other adapted alpha character.	IFR flight
E	Enroute (IFR) flight		

Tbl A-7. Example Sensor Mode Indicators

Reference to change sensor mode: Section 4.2.1 *(p. 4−23)* and Section 8.23 *(p. 8−33)*.
Reference to enable / inhibit PAM display view: Section 4.2.2 *(p. 4−25)*.

Indicators	Description
SYS	Multi−sensor mode −− positional data is displayed for targets using the reported position from the best available sensor. If adapted, the sensors could include a "fast update sensor" as described below for <ADS> and <MLT>.
FUSED	Fused mode −− positional data is displayed for a target by periodically extrapolating its current position using the smoothed position from the last reports. The smoothed position is calculated from the positions reported by all sensors updating the target and taking into account the error characteristics of each reporting sensor. If adapted, the sensors could include a "fast update sensor" as described below for <ADS> and <MLT>.
FUSED PAM	Fused mode with Parallel approach monitor (PAM) display enabled where fused track symbols are displayed using the reduced symbol size.
ADS	Automatic Dependent Surveillance (ADS) sensor selected (available to MCP Operational Supervisor only) −− positional data received from ground stations are derived from the Global Positioning System (GPS) or a Flight Management System (FMS). Positional data from this sensor are updated more frequently than for normal radar data and is therefore referred to as a "fast update sensor".
MLT	Multilateration (MLAT) sensor selected −− positional data is obtained from a system of four or more monitoring stations which detect signals from aircraft resulting from interrogation. Each station transmits aircraft identity and the time of signal receipt. Using triangulation, the position of each aircraft is computed. The MLAT sensor is typically selected when in Final Monitoring Mode (FMA). Positional data from this sensor are updated more frequently than for normal radar data and is therefore referred to as a "fast update sensor".
BOS PAM	Slant range mode using BOS sensor with Parallel approach monitor (PAM) display view enabled −− presents tracks using the Slant range presentation.
BOS GND	Ground range mode using BOS sensor −− shows tracks in Ground range mode.
BOS PAM IBI	Slant range mode using BOS sensor with Parallel approach monitor (PAM) display view enabled −− presents tracks in Slant range presentation. Selected sensor is an ASR9MS in the Independent Beacon Interrogation (IBI) mode.
BOS GND MODE S	Ground mode using BOS sensor −− presents tracks in Ground range presentation. Selected sensor is an ASR9 or ASR9MS in mode−S.
(blank field)	Slant Range mode at a site with only one adapted sensor.

Note: The "IBI" and "MODE S" indicators do not appear under any one of the following conditions:
a) The current mode is Multi−sensor or Fused mode
b) The currently selected sensor is not an ASR9MS
c) The system mode is TRAIN (for training)
d) The system is running performance verification
e) The field has been disabled through use of adaptation data

Note: When the TCW is in FMA mode, if the selected sensor is in or changes to IBI mode, the "IBI" indication appears in yellow and blinks (to indicate loss of accuracy of Mode−C altitude data). To stop the blinking, press <Δ><**ENTER**>.

Tbl A-8. Special Condition Alert Codes

Default Abbreviation	Description
EM	General Emergency (appears in alert color Red)
HJ	Hijack Situation (appears in alert color Red)
RF	Radio Communications Failure (appears in alert color Red)
LL	Lost Link (appears in alert color Red) (see Note 1)
MI	Military Intercept (appears in caution color Yellow)
Note 1: Lost Link (LL) is defined as the loss of a command and control link between a control station and an unmanned aircraft system (UAS).	

Tbl A-9. FSL System Status Area

Field Name	*Example Data*
Ⓐ TCW/TDW Failure Alert (Red), EFSL / DSF indicator	**WKST FAIL**
Ⓑ System Overload Alert (Red)	**OVERLOAD**
Ⓒ Sensor Failure Alert (Red)	▼**MHT**
Ⓒ1 ADS Ground Station Alert (Red)	**CHILL WGROV WLMNG +**
Ⓓ Weather Level Status (Cyan)	1 (2)(3) 5 6
Ⓔ UTC Time, System Altimeter Setting	0812/55 29.95
Ⓔ1 Enabled Traffic Flow Region	FLOW: W
Ⓕ Main ATIS and General Information	H RWY 09 CLSD
Auxiliary General Information Text 1 (with ATIS)	BED:C AIRSHOW
Aux. General Information Text 2 (without ATIS)	ORH:RESTRICTION MAP 8
Ⓖ FSL/EFSL/DSF Status, Sector Plan, Sensor Modes	OK/OK/NA WWP BOS PAM MODE S
Ⓗ Select Codes/Code Blocks (up to 2 lines)	44 57 1632 4314 5555
Ⓘ Active SPC Codes (Red or Yellow)	**HJ RF EM LL MI**
Ⓙ System Off Indicators	MSAW CA ZONE
Ⓚ Display Range, Predicted Track Line Value	60NM PTL: 1.5
Ⓛ Altitude Filters	N99 350 U 100 300 A
Ⓜ NAS Link Status	NAS: ZCB OFF [ENA RDP]
Ⓜ1 ARTS Link Status	ARTS: FAIL
Ⓜ2 ATPA In−trail Approach Volume Status	INTRAIL OFF: RG1 RG2 RG3 RG4
Ⓜ3 ATPA In−trail 2.5 nm Reduced Separation Status	INTRAIL 2.5 ON: RG5 RG6
Ⓝ Airport with Altimeter (up to 2 lines)	BOS*29.95M BED 29.97A
Ⓞ Mode of Operation	MODE: NORMAL
Ⓟ Test Target, Weather History Status	TT WX HIST:2
Ⓠ Quick Look TCPs	QL: 1D+ 1F 2T
Ⓡ TCW/TDW Off Indicators	TW OFF: AURL
Ⓢ Keyboard 1 Consolidation / Coupling Status	1R CON: 1R 1N 1E
Ⓣ Keyboard 2 Consolidation / Coupling Status	1S CPL: 1D
Ⓤ Keyboard 3 Consolidation / Coupling Status	(TCP w/o airspace not shown unless coupled)
Ⓥ TCP Off Indicators	1R OFF: HOPT HOPX
Ⓦ CRDA Indicators	CRDA ENABLED
Ⓧ AMZ Status	AMZ: NW

Note: All fields in the System Status area can be toggled on and off using the System Status filter Display Control Bar described in Section 4.7 (p. 4−44) except for fields Ⓐ Ⓑ Ⓒ and Ⓒ1.

Ref.	Field Name	Field Description
A	TCW/TDW Failure Alert, EFSL / DSF indicator	This field is either empty (which means this TCW/TDW is in a normal healthy state or a non−catastrophic failure state) or it shows "WKST FAIL" (in red) indicating a problem with this TCW/TDW as determined by System Monitoring and Control. Switching to ESL (at FSL G1/G2 sites) or EFSL (at dual FSL/EFSL sites) as described on *p. 7−12* may be required. If the WKST FAIL message is present, a red banner is also displayed on the radar window with the message "WORKSTATION FAILURE" as shown in Figure 2−2 *(p. 2−4)*. Workstation banners are described in Table 2−3, *(p. 2−6)*. If this workstation is switched to EFSL, the text "EFSL" (in yellow) is displayed (dual FSL/EFSL sites only). If this workstation is switched to DSF mode, the text "DSF" (in yellow) is displayed. <SSA FILTER> button = not applicable (field cannot be toggled off)
	Example:	**WKST FAIL**
B	System Overload Alert	This field is either empty which means this TCW/TDW is OK, or it shows OVERLOAD (in red) indicating the CPU and/or memory usage of this TCW/TDW has exceeded a threshold. The thresholds are: "SDD overload threshold 1 (memory)" and "SDD overload threshold 1 (processing)" and are set at the MCW. Removal of maps and unnecessary graphics may reduce the computer's load. Switching to the Emergency Service Level (ESL) as described on *p. 7−12* may be required. Remote TCW/TDWs will display "AOI FILTERED" (Area Of Interest Filtered) (in green) if more surveillance data is available than can be transmitted on the Remote Tower / TRACON communication link. The target and track data will be limited to data within the adapted coverage area for the Remote Tower / TRACON location. <SSA FILTER> button = not applicable (field cannot be toggled off)
	Example:	**OVERLOAD**
C	Sensor Failure Alert	The Red Check symbol (solid inverted delta centered in a green outlined box) is always displayed to verify color red is OK. Following the check symbol is either an empty field which means there are no unavailable or failing sensors, or it shows one or more 3−character sensor names (in red) of unavailable or failing sensors. Up to six (6) failed sensors can be indicated. Remote TCW/TDWs in DSF mode will display unavailable or failing sensors that are adapted for the direct feed. <SSA FILTER> button = not applicable (field cannot be toggled off)
	Example:	▼ **MHT**

Ref.	Field Name	Field Description
C1	ADS Ground Station Alert	This field is empty under any one of the following conditions: – there are no failing or offline ADS–B Ground Stations – if there are failing or offline Ground Stations, site adaptation suppresses the display of such stations in the System Status Area Otherwise, this field shows up to three (3) failed or offline ADS–B Ground Station short names (up to 5 characters) with precedence given to preferred adapted Ground Stations (if any). If there are more than three failing or offline Ground Stations, then a plus symbol (+) will appear after the Ground Station names shown. Refer to "ADS–B Ground Station List Commands" *(p. 6–185)*. <SSA FILTER> button = not applicable (field cannot be toggled off)
	Example:	**CHILL WGROV WLMNG +**
D	Weather Level Status	Lists the weather levels (1 through 6) for which radar data is currently being received. Level 6 represents the most intense weather. In the example below, 4 is not displayed meaning radar data for that level is not being received. Levels in parentheses are available and enabled for on–screen display. To enable / inhibit the display of weather, refer to *p. 4–42*. <SSA FILTER> button = <WX>
	Example:	1 (2)(3) 5 6
E	UTC Time, System Altimeter Setting	Hours and minutes / seconds in 24–hour, GMT/UTC time format, followed by the system altimeter setting which is used for altitude correction in this Terminal control area. The altimeter setting is displayed in inches of mercury or millibars (or both) according to site adaptation. To change the System altimeter setting, refer to *p. 5–51*. <SSA FILTER> buttons = <TIME> and <ALTSTG>
	Example:	0812/55 29.95
E1	Enabled traffic flow region	Indicator showing the enabled traffic flow region for automatic runway assignment (only one region can be enabled at a time). If no traffic flow region is enabled, the line is removed from the SSA. Possible indicators are the two adapted single–character site–specific region identifiers (for example, E and W). <SSA FILTER> button = <FLOW>
	Example:	FLOW: W

Ref.	Field Name	Field Description
F	Main ATIS and General Information, Auxiliary Gen. Info. text lines (with or without ATIS)	Up to 10 lines of 32−character text can be displayed. The top line is the Main GI Text with ATIS which is followed by up to nine (9) auxiliary GI lines with optional ATIS. To create, modify, and delete ATIS and General information text, refer to *p. 5−50.* <GI TEXT FILTER> buttons = <MAIN>, <GI 1>, ... , <GI 9>
	Example:	H RWY 09 CLSD BED:C AIRSHOW ORH:RESTRICTION MAP 8
G	FSL / EFSL / DSF Status as follows depending on system configuration: 1. FSL 2. FSL/ESL 3. FSL/EFSL 4. FSL/EFSL/DSF 5. FSL/DSA (ELITE) 6. FSL/DSF (ELITE), Configuration Plan, Sensor Modes	FSL, EFSL (or ESL), and DSF (or DSA) status can be one of the following indicators: OK = fully functioning and operational, NA = not available, TR (in yellow) = background system (either FSL or EFSL) is running a training exercise, NR = the system is OK but no data is being received from the selected sensor (or sensors if in Multi−sensor or Fused mode). The FSL status indicator can be manually toggled between OK and NA using the FSL MCW. The EFSL status indicator can be toggled manually between OK and NA using the EFSL MCW. Also shows currently enabled Configuration plan ID for the Primary TCP's Terminal sector (to change, see *p. 8−18*) and currently enabled sensor mode (to change, see *p. 4−23* and *p. 8−33*) including Parallel Approach Monitor indicator when enabled. Table 2−16 (*p. 2−81*) describes example sensor mode indicators. <SSA FILTER> buttons = <STATUS>, <PLAN>, <RADAR>
	Example:	OK/OK/NA WWP BOS PAM MODE S
H	Select codes / Code Blocks	Up to ten (10) block selected beacon codes where codes are 2− or 4−octal digits. For 2−digit codes, all codes in the code bank are selected. Tracks corresponding to these codes are shown with special Position symbols and data blocks. To select and deselect beacon code track presentation, refer to *p. 6−89.* <SSA FILTER> button = <CODES>
	Example:	44 57 1632 4314 5555 3333 3334 3335 3336 3337
I	Active Special Condition Codes	Up to 12 active SPC codes can be displayed. The primary SPC codes (HJ, RF, EM, LL) are displayed in red indicating an alert situation. The secondary SPC codes (MI, and any other adapted code) are displayed in yellow indicating a caution situation. Table 2−17 *(p. 2−82)* lists currently defined SPCs. A general description of SPC tracks appears on *p. 2−98.* To acknowledge an SPC situation, refer to *p. 7−7.* SPC codes for unassociated tracks that are beyond the adapted extended distance off−screen may not be displayed (depending on adaptation data). <SSA FILTER> button = <SPC>
	Example:	**HJ RF EM LL MI**

Ref.	Field Name	Field Description
J	System Off Indicators	Indicators showing system−wide disabled processing capabilities. For example, "CA" is shown to remind the controller that Conflict Alerts are inhibited system−wide. Table 2−18 (*p. 2−82*) lists the indicators and references instructions for enabling / inhibiting the associated capabilities. <SSA FILTER> button = <SYS OFF>
	Example:	MSAW CA ZONE
K	Display Range, PTL value	Current display range in nautical miles (distance from the edge of the screen to the center) followed by the current Predicted track line value in minutes (or seconds when in FMA mode). To change range, refer to *p. 4−33*. To change PTL value, refer to *p. 6−15*. To change PTL value when in FMA mode, refer to *p. 6−125*. <SSA FILTER> buttons = <RANGE> and <PTL>
	Example:	60NM PTL: 1.5
L	Altitude Filters	Tracks within these limits are displayed normally. Tracks outside these limits are not displayed unless the track is in an adapted and enabled Altitude Filter Override volume for the TCP. There are two ranges displayed: the first set is for unassociated tracks (tracks without a flight plan) and the second set is for associated tracks. To modify the limits, refer to *p. 4−72*. <SSA FILTER> button = <ALT FIL>
	Example:	N99 350 U 100 300 A
M	NAS Link Status	Indicates a non−normal status of the enroute (NAS) IFDT link. If this field is empty, the link to the NAS is online, status is normal, with IFDT enabled, and the IFDT mode set to RDP. The field will also be empty (and the "NAS: " label will not appear) if there is no IFDT link adapted for the site. The data for a non−normal link has four fields as follows: Facility ID — name of the enroute system (for example, ZCB) Link mode — ON = message exchange is currently taking place OFF = no message exchange is currently taking place (except for possible TR/DT exchange) FAIL = failing IFDT status — ENA = IFDT is currently enabled DIS = IFDT is currently disabled IFDT mode — RDP = enroute system is in RDP mode FDP = enroute system is in FDP mode To change the IFDT mode or status, refer to *p. 8−20* through *p. 8−23*. <SSA FILTER> button = <NAS I/F>
	Example:	NAS: ZCB OFF [ENA RDP]

Ref.	Field Name	Field Description
M1	ARTS Link Status	Indicates a non−normal status of the Automated Radar Terminal System (ARTS) link. If this field is empty, the ARTS link is online and its status is normal. This field will also be empty if no ARTS link is adapted for the site. The data for a non−normal link has one field as follows: Link mode : OFF = link is configured offline and no message exchange is taking place. FAIL = link is configured online but problems have been detected with the message exchange.
	Example:	ARTS: FAIL
M2	ATPA In−trail Approach Volume Status	If any ATPA Approach Volumes that are of interest to this TCP have been manually disabled since the last configuration plan change, the field displays "INTRAIL OFF" followed by the names of the disabled volumes. If all of the volumes cannot be displayed due to space limitations, a plus sign (+) will be shown at the end of the line. If none of the ATPA Approach Volumes that are of interest have been disabled since the last configuration change (including cold start), the field displays "INTRAIL ON". This field is not shown if ATPA is disabled system−wide. <SSA FILTER> button = <INTRAIL>
	Example:	INTRAIL OFF: RG1 RG2 RG3 RG4
M3	ATPA In−trail 2.5 nm Reduced Separation Status	This line displays the ATPA Approach Volumes for which ATPA In−trail 2.5 Reduced Separation is enabled. If all of the volumes cannot be displayed due to space limitations, a plus sign (+) will be shown at the end of the line. If the field is empty, ATPA In−trail 2.5 nm Reduced Separation is disabled for all ATPA Approach Volumes that are of interest to this TCP. This field is not shown if ATPA is disabled system−wide. To enable / disable ATPA 2.5 nm separation, refer to *p. 8−57.* <SSA FILTER> button = <2.5>
	Example:	INTRAIL 2.5 ON: RG5 RG6

Ref.	Field Name	Field Description
N	Airport with Altimeter	Airport information for up to six (6) airports or four (4) airports if both pressure units are to be displayed. These data include (for each airport) a 3−character airport identifier, 4−digit air pressure reading in inches of mercury or 3− or 4−digit air pressure reading in millibars or both (according to adaptation) and a status indicator ("A", "E", "M", or blank). The possible status indicators described below are appended to each entry: – "A" indicates the pressure reading is being automatically updated by an external altimeter station. – "E" indicates the pressure reading is manually entered and it is estimated. – "M" indicates the pressure reading was being automatically updated by an external altimeter station but updates are stale (entry shown in steady green) or missing (entry shown in flashing yellow). – A blank status indicates the pressure reading is manually entered. This field will be forced to display at a TCW/TDW if a station that is adapted to that TCW/TDW changes to the missing status. If a TCW/TDW is placed in DSF or DSA mode and if any of the stations that are adapted to that position are in automatic mode, the status for each of these stations will be immediately changed to missing therefore causing this field to be forced to display. An asterisk (*) appears after the Airport ID if Instrument Approach statistics are maintained for the airport (and associated airports). To change the default altimeter setting for this TCW/TDW, refer to *p. 5−51.* To enable Instrument approach statistics, refer to *p. 3−45.* To view the Altimeter list, refer to *p. 4−66.* <SSA FILTER> button = <AIRPORT>

	Example:	Display in inches of mercury:
		`BOS*29.95M BED 29.97A ORH 29.98E BVY 29.96`
		Display in millibars:
		`BOS* 998M BED 1000A ORH 1001E BVY 999`
		Display in both units:
		`BOS*29.47/ 998M BED 29.53/1000A ORH 29.56/1001E BVY 29.50/ 999`

Ref.	Field Name	Field Description
O	Mode of Operation	Indicator for the mode of operation for this TCW/TDW. Possible indicators are: NORMAL = operational / normal, TEST = system test, TR02 = running training scenario 02, PVER = performance verification, NORMAL DSF (in yellow) = Direct sensor feed mode, and NORMAL DSA (in yellow) = Direct sensor access mode. Training, performance verification, DSF, and DSA are modes that are local to the TCW/TDW whereas Test and operational / normal are system−wide modes. At dual FSL/EFSL sites, DSF mode can only be enabled at Remote TCW/TDWs after being switched to EFSL (it is not available from FSL). At ELITE sites, DSF mode can only be enabled at Remote TCW/TDWs. To enable DSF mode, refer to the command "Enable DSF mode for this Remote TCW/TDW" *(p. 7−38)*. DSA mode is only available at local TCW/TDWs at ELITE sites. To enable DSA mode, refer to the command "Enable DSA mode for this Local TCW/TDW (ELITE only)" *(p. 7−44)*. <SSA FILTER> button = <OP MODE>
	Example:	MODE: NORMAL
P	Test Target, Weather History Status	TT is displayed when test targets are on screen. Otherwise, this field is blank. To show or remove test targets refer to *p. 4−26*. WX HIST:2 = oldest weather history is shown, WX HIST:1 = the next to the oldest weather history is shown, WX HIST:0 = the most recent weather history is shown. To display weather history, refer to *p. 6−10*. <SSA FILTER> buttons = <TT> and <WX HIST>
	Example:	TT WX HIST:2
Q	Quick look TCPs	Indicates TCPs that are quick looked (up to two lines can be shown). A plus sign (+) immediately after a TCP indicates that data blocks for tracks owned by that position are displayed in the Owned color (called "quick look plus"). Such TCPs (with the "+" sign) are displayed first in the list. "ALL+" or "ALL" is shown if all facility−adapted TCPs are quick looked followed by any individual quick looked or quick looked plus TCPs. To Quick look tracks, refer to Section 6.13 *(p. 6−77)*. A plus sign (+) with a preceding space at the end of the second line is shown if more TCPs are quick looked than can be displayed. <SSA FILTER> button = <QL>
	Example:	QL: 1D+ 1F 2T
R	TCW/TDW Off Indicators	Indicators showing disabled processing capabilities only for this TCW/TDW. Table 2−19 *(p. 2−83)* lists the possible indicators and references instructions for enabling / inhibiting the associated capabilities. <SSA FILTER> button = <TW OFF>
	Example:	TW OFF: ADS

Ref.	Field Name	Field Description
S	Keyboard 1 Consolidation or Coupling status	Shows either the TCPs that are currently assigned to this keyboard (consolidation) or the TCP to which this keyboard is coupled. In the example below, keyboard 1R has responsibility of TCPs 1R, 1N, and 1E. If ten (10) or more TCPs are consolidated to a keyboard, the plus sign (+) is added to the end of the TCP list. If a TCP is prefixed with an asterisk (*), this indicates that this TCP was involved in a basic consolidation and there are flights still assigned to this keyboard. If the prefix is a virgule (/), this indicates that this TCP was involved in a limited consolidation and that new flight plans entered at the limited consolidated position remain at that position. A limited consolidated position can also receive intrafacility handoffs and re–directs of interfacility handoffs that are directed to this position. To change the consolidation status of this TCW/TDW, refer to *p. 3–20*. <SSA FILTER> button = <CON/CPL>
S	Example:	1R CON: 1R 1N 1E
T	Keyboard 2 Consolidation or Coupling status	Same as above. In the example below, keyboard "1S" has been coupled to keyboard "1D". To change the coupling status of this TCW/TDW, refer to *p. 3–17* and *p. 3–19*. <SSA FILTER> button = <CON/CPL>
	Example:	1S CPL: 1D
U	Keyboard 3 Consolidation or Coupling status	Same as above. In the example below, the keyboard has no airspace responsibility nor is it coupled with any other keyboard. Therefore, it is not currently in use, nor will it be shown in the SSA. <SSA FILTER> button = <CON/CPL>
	Example:	(TCP w/o airspace not shown unless coupled)
V	TCP Off Indicators	Indicators showing disabled processing capabilities for the primary TCP associated with this TCW/TDW. If the TCP has no disabled capabilities, the line is removed from the SSA. Table 2–20 (*p. 2–83*) lists the possible indicators and references instructions for enabling / inhibiting the associated capabilities. <SSA FILTER> button = <OFF IND>
	Example:	1R OFF: HOPT HOPX
W	CRDA Indicators	If a Runway Pair Configuration(s) is enabled at this TCW/TDW for the Converging Runway Display Aid (CRDA), the text "CRDA ENABLED" is displayed. To view the current CRDA status, use the command "Toggle display of CRDA status list" *(p. 6–32)*. CRDA commands are described in Section 6.5 *(p. 6–18)*. <SSA FILTER> button = <CRDA>
	Example:	CRDA ENABLED

Ref.	Field Name	Field Description
X	AMZ Coverage	When this field is empty all coverage zones are operational. If this field is not empty, it lists Coverage Zone failures for PRM−A indicating a lack of surveillance coverage from the associated multilateration sensor. The red failure banner ("AMZ FAILURE") will also be displayed if this field contains an AMZ Coverage failure indicator (reference Table 2−3, *p. 2−6*). <SSA FILTER> button = <AMZ>
	Example:	AMZ: NW

Tbl A-10. Failure Banner Text

SYSTEM FAILURE- SELECT ESL
Description: FSL Service Level is not available because this workstation's FS processor has detected a catastrophic failure of a software or hardware component that is external to this workstation and is critical in providing the FS service level. Furthermore, the failure results in a loss of radar/sensor updates to the display. If this banner appears, the radar window is frozen. It is very likely that the backup system components are not affected by the same failure so switchover to the backup system is possible. Also, switchover between the backup system and FSL is possible so Full data blocks can be reviewed (though the tracks will be frozen in FSL). For dual FSL (FSL / EFSL) systems, if this banner appears, the one−way data synchronization from FSL to EFSL is automatically terminated at all TCW/TDWs.
WORKSTATION FAILURE
Description: FSL Service Level is not available at this workstation because this workstation's FS processor has detected a catastrophic hardware or software failure regarding this workstation's FS components. If this banner appears, the radar window is frozen. It is very likely that the backup system components are not affected by the same failure so switchover to the backup system is possible. Also, switchover between the backup system and FSL is possible so Full data blocks can be reviewed (though the tracks will be frozen in FSL). Note also that once this banner appears, action by AF personnel will be required before the workstation can be returned to support FSL. For dual FSL (FSL / EFSL) systems, if this banner appears, the one−way data synchronization from FSL to EFSL is automatically terminated at this TCW/TDW.
DIRECT SENSOR FEED MODE FAILURE
Description: Direct Sensor Feed (DSF) mode is not available at this workstation because the workstation has detected a failure of the hardware or software that is critical in providing the DSF display mode. Furthermore, the detected failure results in the loss of radar/ sensor updates to the display. If this banner appears, the radar window is frozen. It is very likely that FSL or EFSL system components are not affected by the same failure so switchover may be possible

provided FSL or EFSL is not experiencing a catastrophic failure for other reasons. This banner can only appear when in DSF mode.
AMZ FAILURE
Description: An FMA AMZ Failure is declared because the surveillance sensor does not have sufficient coverage for the runways in the AMZ. Other sensors may continue to provide some track updates. If this banner appears, the radar window is not frozen. This banner will also be displayed if the controller has not selected the surveillance sensor that is required for this AMZ.
SURVEILLANCE SENSOR FAIL − <*SENSOR #*> (<*SENSOR ID*>)
Description: A Sensor Failure is declared because the surveillance sensor has failed. This banner would mask banners for other failed sensors whose sensor numbers are higher. The banner can only appear at workstations adapted to allow its display and is not shown in training exercises. The display of the banner can be suppressed using the command "Suppress Surveillance Sensor Failed banner". If this banner appears, the radar failure will also be displayed in the System status area. This banner will be displayed at positions that are currently in DSF mode if the currently selected sensor has failed. If this banner appears, the controller should attempt to select another sensor.
SERVICE LEVEL NOT AVAILABLE
Description: The appearance of this banner indicates the selected Service Level (FSL, EFSL, or ESL) has been set to unavailable at the Maintenance Control Position (MCP) for that service level. If this banner appears, the radar window is not frozen. Note also that if this banner appears the synchronizing of workstation settings and data between FSL and ESL/EFSL is no longer maintained. The appearance of the system failure banner and the workstation failure banner take precedence over the appearance of the service level not available banner.